IV 40

2571, Epigraphia Indica and Record of the Archaeological Survey of India. Vol. XVI, n.d.

Sub: Archaeology - Record - Archaeological Survey - India. n.d.

WEST BENGAL SECRETARIAT ★ LIBRARY ★

HEAD.
Received from
25 OCT
Register Entry

EPIGRAPHIA INDICA

VOLUME XVI

GOVT. OF WEST BENGAL SECRETARIAT LIBRARY

No. 1.—SOGAL INSCRIPTION OF THE REIGN OF TAILA II: SAKA 902.

BY LEWIS RICE, C.I.E., AND L. D. BARNETT.

Sogal is a village in the Parasgad *tāluka* of Belgaum District, Bombay Presidency. Its ancient name is given in our inscription variously as Soval, Sōlu and Sōl; to this we shall revert anon. It is marked on the Bombay Survey sheet No. 305 as in about long. 75° ½′ and lat. 15° 5′. The following record is now edited for the first time from ink-impressions prepared for the late Dr. Fleet, and now in the British Museum; but I have been unable to discover in what part of the village the original stone was found. The latter bears on its topmost compartment, which is rounded, some sculptures, viz. in the centre a shrine surmounted by a spire of the Dravidian order, and in it a *liṅga* on its stand, with a priest sitting at the proper right of it; directly below it, a squatting bull; to the proper left of the shrine, a squatting figure of a votary, with clasped hands, facing full front; to the right of it, a cow with suckling calf looking towards it; over it, the sun (on proper right) and moon (on left); flanking both sides of the shrine and meeting over its summit, floral festoons twined so as to form four circles, in which are small figures. Below this is the inscribed area, consisting of three compartments: the first (lines 1-3) is 1 ft. 8¾ in. wide and 2⅝ in. high; the second (lines 4-64) is 2 ft. wide and 3 ft. 10½ in. high; and the third (lines 65-68) is 1 ft. 9 in. wide and 4 in. high. The inscription is on the whole well preserved.—The character is Kanarese, of a rather crabbed type of the period; the letters vary from about $\frac{5}{16}$ in. to $\frac{9}{16}$ in. in height. The cursive *v* (above, Vol. XII, p. 335) occurs in *Vṛi* (l. 5).—The language is Old Kanarese, except for the formal Sanskrit verses Nos. 1, 34, and 35. The *ḷ* is preserved in *iḷdu* (l. 2), *negaḷda* (l. 32 : a tribrach); it is changed to *r* in *pogarddaṁ* (l. 9) and *porttuṁ* (l. 13); and in all other cases it is changed to *ḷ*. The archaic participle in *-oṁ* occurs in *pratipāḷisidoṁge* (l. 58), in what seems to be a quotation from an earlier poem; in the same verse we find *ghātisidaṁge*. *Pariṇatikeye* (l. 30) and *bhūmiye* (l. 52) are instrumentals; see above, Vol. XIV, p. 277 n. In the words *Kaṁchale-kānteya biṭṭa dharmmamaṁ* (l. 55) we have what looks like an instance of the use of genitive for nominative (Kittel, *Gram.*, § 352. 1, p. 393: see my note in *Journ. R. Asiat. Soc.*, 1918, p. 105). In *Rāghava-dvishana nachchuva* (l. 18) it is possible to take °*dvishana* similarly as genitive for nominative; but I prefer to regard it as accusative, on which see Dr. Fleet's remarks above, Vol. XI, p. 3. A few words are of lexical interest, viz. *gadduge* (l. 12: cf. Kashmiri *goḍ*ᵘ ?), *seligu* (l. 15: apparently a derivative from *śalākā*), *vikētu* (l. 35), *rāṇa* (l. 41), and *vibhōga* (l. 46).

The record, after prefatory verses (ll. 1-5), describes the beauties of the surrounding woods (ll. 5-7) and the sanctuary of Suvarṇākshi, on which see below (ll. 7-16). In this

establishment the chief was **Tribhuvanasiṁha Paṇḍita**, an eminent ascetic and divine (ll. 16-17). The foundation-legend of the place is told in outline (ll. 17-21). It was established by the kings **Māli** and **Sumāli** at the end of the Trētā Age. The latter gave his name to the place; for the names by which it is designated—**Sōlu** (ll. 20, 44), **Sōl** (l. 50), and **Soval** (l. 54)—are derived from *Sumāli* (or *Saumāla*).[1] The poet then introduces us to another distinguished Śaiva doctor, **Gaṅgarāśi** (ll. 21-24), and to one of his lay disciples, named **Kañchikabbe** (**Kañchiyabbe** or **Kañchale**), of the Dhanaga family, the wife of **Kariya Kētimayya** and mother of **Chaṭṭa**, a generous benefactress of her church (ll. 24-33). He next devotes a verse (ll. 33-36) to the praises of king **Taila**, whom he describes as having conquered the **Chōḷa** and **Lāḷa** (**Lāṭa**), and cut off the heads of **Raṇakambha** and **Kakkala**.[2] The next passage (ll. 36-39) refers the record to Taila's reign, styling him **Nūrmaḍi-Tailapa-dēva**, with various titles, on which see *Dyn. Kanar. Distr.*, p. 428; and then there appears on the scene a **Raṭṭa** prince named **Katta**, son of **Kanṭheyabhārada Nannapayya**, who at the time was ruling as Taila's viceroy over **Kūṇḍi** (ll. 39-43). This Katta is identical with **Kārtavīrya I**, on whom see *Dyn. Kanar. Distr.*, p. 553. The next section (ll. 43-57) is occupied with the dating and specification of the endowment made by Kañchiyabbe for the benefit of the temple of Suvarṇākshi and the *sattra* or almshouse connected with it; its trustee was Tribhuvanasiṁha, and it was to be under the protection of the Thirty (heads of households) of Soval. Several hortatory verses (ll. 57-65) clinch the deed of gift: the first is evidently a quotation, as it addresses an otherwise unknown **Dēvaṇa Paṇḍita**, and the third and fourth narrate the legend of Indra and the Chāṇḍālī. A further verse (ll. 66-67) informs us that the poet who composed our inscription was **Kamaḷāditya** [more likely **Kavikamalāditya**.—Ed.]; and a final clause stipulates that the cooking at the almshouse must be done by a Brāhmaṇ woman (ll. 67-68).

Māli and Sumāli, the protagonists of the foundation-legend mentioned above, are the Rākshasas whose history is narrated in the *Rāmāyaṇa*, VII. v. ff., and *Bhāgavata-purāṇa*, VI. x. 21 and VIII. x. 56. A clue to the mystery of their appearance in the present legend seems to be afforded by the *Brahma-vaivarta-purāṇa*, III (*Gaṇēśa-khaṇḍa*), xviii-xix, which relates that they were devotees of Śiva, and on being smitten by the Sun-god with disease propitiated him by worship. It would therefore seem that the god Suvarṇākshi mentioned in our inscription was the Sun-god, worshipped as a phase of Śiva; and this will partly explain the rather obscure verse 18, which refers to his temple.

The date[3] is given on ll. 43-44 as: Śaka 902, the cyclic year Vikrama; the new-moon day of Āshāḍha; Sunday; an eclipse of the sun. This is irregular, according to the usual calculation. The *tithi* mentioned corresponded to **Wednesday, 14 July, A.D. 980**, on which it ended at 21 h. 7 m. after mean sunrise (for Ujjain); and there was no eclipse of the sun. But Mr. A. Venkatasubbiah, who has discussed the data in his *Some Śaka Dates in Inscriptions*, p. 133, remarks: "According to the Ārya and Brahma Siddhāntas the mean-sign Jovian year Vikrama was current at the beginning of Āshāḍha in Ś. 900. On the *amāvāsyā* at the beginning of this Āshāḍha, **8th June, A.D. 978**, there took place a solar eclipse which was visible in India. The week-day however was Saturday and not Sunday. This Saturday—8th June, A.D. 978—seems to be the equivalent of the given date."

The **places** mentioned are Sogal itself, which appears in the form of **Sōlu** (ll. 20, 44), **Sōl** (l. 50), and **Soval** (l. 54), **Kūṇḍi** (ll. 19, 42), **Mārājana** (?) **Beḷavāḍi** (l. 28), and

[1] This equation is phonetically unimpeachable, but on other grounds it is not convincing. However that may be, it is clear that the oldest form of the name was *Soval*. The modern name *Sogal* is an instance of the change of intervocalic *v* to *g*, which, as far as I know, is rare, whereas the reverse change, *g* to *v*, is very common.

[2] See *Dyn. Kan. Distr.*, p. 426; *Ep. Ind.*, Vol. XII, p. 144, etc. The names appear also in the forms *Ranastambha* and *Karkara*.

[3] I have to thank Mr. R. Sewell for his kindness in verifying my calculations.

Tēgūr (l. 49). On the name and site of Sogal see above. For the Kūṇḍi Three-thousand see *I. A.*, Vol. XXIX, p. 278. Beḷavāḍi may be "Belwadi" ("Belowuddee" of the old Indian Atlas), which lies in Sāmpgāon *tāluka*, some 9½ miles SSW. from Sogal. Tēgūr may conceivably be one of two places of that name: there is a Tēgūr in Sāmpgāon *tāluka*, some 22 miles SW. from Sogal, and another in Dhārwār *tāluka*, about the same distance SSW. from Sogal; but both of them are too far to suit the requirements of our text. The other places cannot be identified.

TEXT.[1]

[Metres: vv. 1, 34-5, *Anushṭubh*; vv. 2, 5-10, 12, 14, 16-19, 22-27, 29, 31-33, 36, *Kanda*; vv. 3, 4, 11, 28, 30, *Utpalamālā*; vv. 13, 20, *Mattēbhavikrīḍita*; vv. 15, 21, *Champakamālā*.]

1 Ōm[2] Namas=tuṁga-śiraś-chuṁbi-chaṁdra-chāmara-chāravē | trailōkya-nagar-āraṁbha-

2 mūḷa-staṁbhāya Sa(Śa)ṁbhavē || [1*] Śrīmat-Suvarṇṇākshi-dēvara ·tīrtthadal=iḷdu

3 * * * * * * * * * * nṭarē (?) tapōdhana * * * * *[3]

4 Śrīmad-anavarata-Danuja-nar-āmara-maṇi-makuṭa-taṭa-ghaṭita-pada-padm-ōddāma-yugaḷaṁ

5 trilōka-svāmi Suvarṇṇākshi-dēvar=Ig=emag=oḷpa || [2*] Vṛi || Paṁkaja-shaṇḍa-diṁd=eseva neydala pū-go-

6 ḷadiṁ talirtta māviṁ kusum-ōditaṁ kosagu-pādari-nēril-aśōka-bāḷey=eṁb=aṁkada vri(vṛi)ksha-jātigaḷi-

7 n=iṁ-charadiṁ pugal=eṁba kōkiḷ-āḷaṁkri(kṛi)tadiṁde sāla-banam=oppuvud=ī vishay-āṁtarāḷadoḷ || [3*] Alliya

8 nirjjhar-ōdakadin=oppuva tīrttham=id=ī jagakke peṁp=ellaman=ānta Śaṁkara-Śayaṁbhu-Suvarṇṇan.ahākshi-dēva-[4]

9 pād-ōllasit-āṁbujaṁgaḷane pūjipa bhakti(kta)-janakke mukti taḷv=illade kūḍug=eṁdu pogardda(ḷda)ṁ kavit-ēsa(śa)-

10 mada-prabhaṁjana || [4*] Ka || Puligaḷe dharmma-śravaṇaman=ele miḍukade kēḷ[u*]t-irppuv=ara-giḷigaḷ nirmmaḷa(la)-

11 munipaś(r)=ōduv=ōdaṁ chaḷavādeḍey[5]=aridu pēdvu(ḷvu)v=iru ḷuṁ pagaluṁ || [5*] Vānara-saṁhati dēva-snānaṁ māḍuva-

12 rgge(rge) gaddugeya nīraṁ san-mānade tand=īvuv=enalk=ān=aṛiyeṁ pogaḷal=avara tapad=ugrateya || [6*] Pāpi puga-

13 lu pugal=ugrada kōpi pugalu pugal=aśēsha-dharmma-drōha-vyāpāri pugal=pugal=end=ā porttuṁ kōkiḷaṁgaḷ-u-

14 liguṁ banadoḷu || [7*] Gaḷapuv=ara-giḷiya kukiluva kaḷa-haṁsɛ(se)ya gāvarippa peṇ-chu(du)ṁbiya bāvaḷisuva puru-

15 ḷiya ko[ṁ*]ḍaṁgaḷan=agisuva ravame ṁagada nālkuṁ deseyoḷu || [8*] Nōḍa tanu muṭṭe siddham=māḍuva selig=ant=aśēsha-rasa-

16 mūḷikegaḷu kūḍugum=amarēndratvaman=ūḍuvar=achcharas[i*]ya[r*]kkaḷ=ā muni-kuḷama || [9*] Int=enisuva siddha-kshētr-āṁtara-

17 tīrtthakke mukhyan=āśrita-sura-bhūjaṁ Tribhuvanasiṁha-munīṁdraṁ tāpasa-gōtra-vairi-kuḷa-gaja-siṁha || [10*] Vri(vṛi) || Nō-

---

[1] From the ink-impression. [2] Denoted by the symbol like a Bengali *o*.

[3] The letters in this line are very much worn, and hardly any can be read with certainty.

[4] The *va* has been omitted, and then added at the end of the line in smaller script.

[5] Read *chaḷa-vāḍadey=*; cf *chala-vādi*. [No emendation is necessary; *chaḷav-āḍ=eḍey= aṛidu* may mean 'observing the places where (the reciters) waver.'—H. K. S.]

18 ḍ-ire Rāghava-dvishana nachchuva **Māli Sumāli** dānavar=mmāḍida supratishṭe(shṭhe)y=adariṁde **Suvarṇṇamahākshi**-dēvar=emb=iḍita-

19 nāmam=āḍudu **Sumāli**-pesar[1]=nnagarakke rūḍiyoḷu kūḍidud=endoḍ=ē vogaḷva[ro*] **Kūṇḍi**-mahī-vaḷay-āntarāḷadoḷ || [11*] Ka || **Mā-**

20 **li-Sumāli**-dvaya-bhūpālar=ddēvargge **Sōlu-mūvattaṁ** sal-līleyoḷe biṭṭu sugati-sukh-ālaya-

21 m=ā Trētey=aṁtya-kālade pokkar || [12*] Vṛi || Tapamaṁ māḍuva tāpasarkkaḷ=alav=all=ōhō (!) tanu-

22 klēśam=emb=upasarggakk=irad=āntu meyyan=aṭavī-śākhaṁgaḷaṁ tind=Umāḍhipanaṁ pūjisi mu-

23 ktiyoḷ=dhareyal=emd=irppaṁ Suvarṇṇākshi-dēva-pad-āṁbhōja-śilīmukh-ābhan=enipaṁ śrī-**Gaṁgarā-**

24 **si**(śi)-vrati || [13*] Ka || Avar=upadēśada dharmmaṁ kivi-vuge naishṭi(shṭhi)ka-tapōdhana-brāhmaṇarggaṁn=aviśēsha-dā-

25 namaṁ māḍuvud=uttama-paksham=emba san-matiyiṁda || || [14*] Vṛi || Hara-charaṇ-ābja-bhri(bhṛi)ṁgi kapaṭ-ō-

26 dha(da)ya-nirjjita[2] nirmmaḷ-āṁgi bhāsuratara-mūrtti nirmmaḷina-kīrtti dayā-pare dāna-dharmma-ta-

27 tpara-guṇa-yukte dēva-guru-bhakte sugōtra-pavitrey=emdu vistaradoḷe kīrttikuṁ vasudhe santa-

28 tadiṁdame **Kaṁchikabbeya** || [15*] Ka || Mārājana[3] Beḷavāḍiya chāru-guṇaṁ **Kariya Kētimayyan**=a-

29 vaḷu vistāra-guṇ-āṁbudhi dharmmada Mēruvan=ā **Kaṁchikabbeyaṁ** pogaḷadar=ār || [16*] Para-hita-guṇa-charitada

30 **Dhanagara** gōtrada **Kaṁchiyabbe** mātā-ratnaṁ dhareg=eseva dhā(dā)na-dharmmada pariṇatikeye piridu parama-māhēśva-

31 riy[ē*] || [17*] Śrīya dvāra-yugaṁ līḷ-āyata-karam=enipa sūryya-kiraṇa-staṁbhaṁ bhū-yuvatiy=oḷage sale ka-

32 ḷp-āyushyaṁ nilkum=endoḍ=ēn=achchariyō || [18*] Ene negaḷda **Kaṁchikabbeya** tane(na)yaṁ Śiva-charaṇa-yugaḷa-kama-

33 ḷa-bhramaraṁ muni-jana-bhaktaṁ śishṭ-ēshṭa-nidhānaṁ **Chaṭṭan**=ugra-pāpa-gharaṭṭa || [19*] Dātāra-varṇṇane || Vṛi || Baḷavach-**Chōḷa-**

34 mahīdharēṁdra-kuḷiśaṁ **Lāḷ**-ōbha-paṁchānanaṁ jaḷa-bhūbhri(bhṛi)d-vana-durgga-mārgga-jaḷadhi-vrātakk=elē Bāḍa-

35 v-ānaḷa-rūpaṁ **Raṇakaṁbha-Kakkala**-śira-chchhēdaṁ[4] rip-ūgr-āvanī-viḷay-ōtpāta-vikētu chakri-ti-

36 ḷakaṁ śrī-**Taila**-rājādhipaṁ || [20*] Sva-ti samasta-bhuvan-āśraya Śrī-Pri(pṛi)thvī-vallabha mahārājādhirāja

37 paramēśva(śva)raṁ paramabhaṭṭārakaṁ **Satyāsra(śra)ya**-kuḷa-tilakaṁ **Chāḷuky-**ābharaṇaṁ śrī-bhuja-baḷa-chakrava-

38 rtti **Nūrmmaḍi-Tailapa**-dēva-vijaya-rājyam=uttarōttar-ābhivri(vṛi)dhdhi-pravardhdha-mānam=ā-chaṁdr-ārkka-t[ā]-

39 raṁ saluttam-ire || Tat-pāda-padm-ōpajīvigaḷ || Vṛi || Jana-pati-chakravartti-pariraksbaṇa-daksha-

40 bhuj-āsi vairi-sādhana-laya-kāri **Raṭṭa**-kuḷa-bhūshaṇan=anya-narēṁdra-darppa-bharṁjanan=avadāta-kīrtti vibhu

41 **Kaṇṭheyabhārada Nannapayya-rāṇana** tane(na)yaṁ vivēka-nidhi **Katta-**mahībhujan=emba per-mmagaṁ || [21*] Ka || Ā-

[1] We should expect °*nesar*.

[2] Read °*varjjite*.

[3] Or *Mārāḍana*: the one letter is not clear.

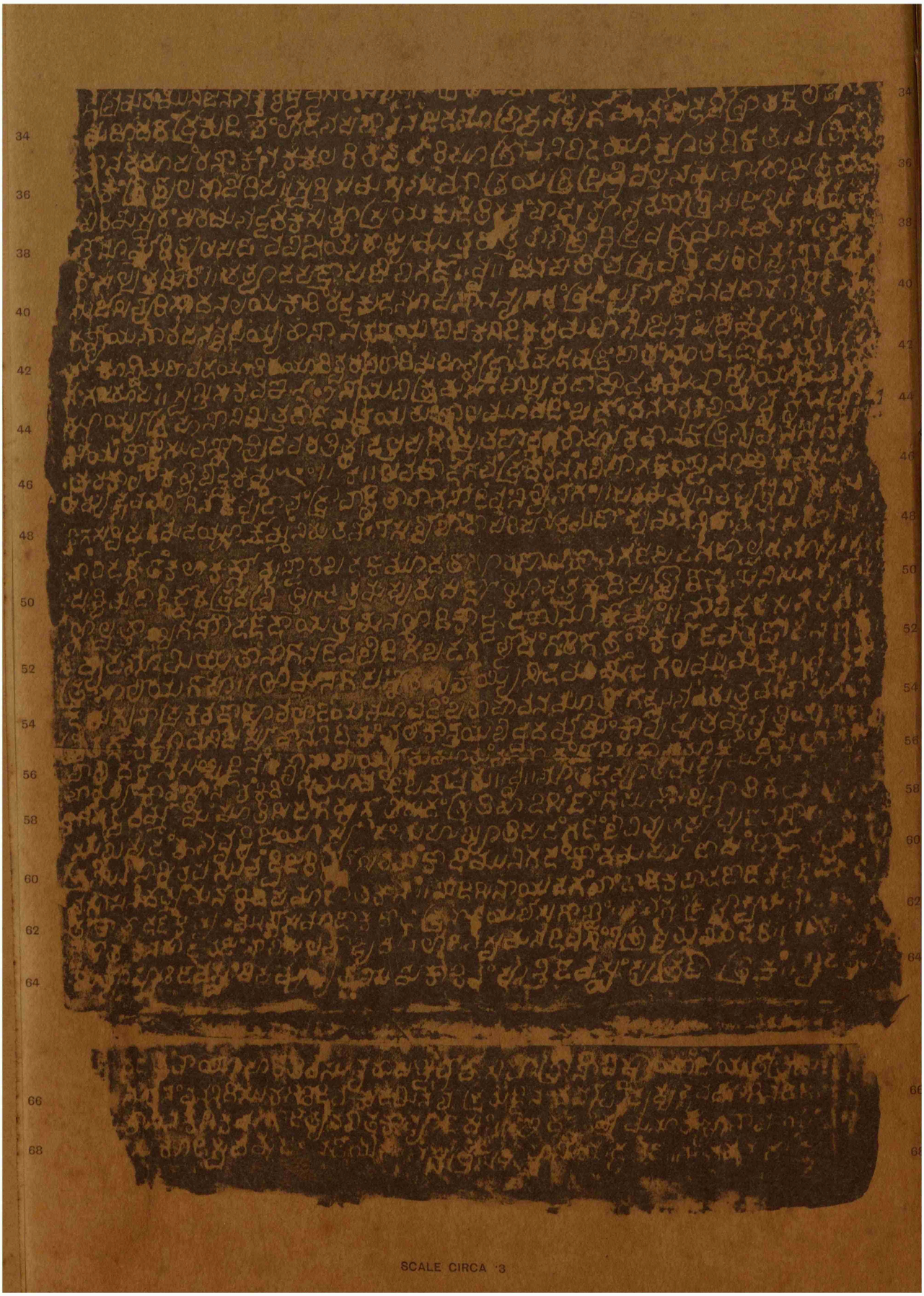
[4] The *chha* is made carelessly like subscript *da*.

Sogal Inscription of the reign of Taila II : Saka 902.

F. W. THOMAS

SCALE CIRCA ·3

WHITTINGHAM & GRIGGS, COLL.



SCALE CIRCA 3

42 taṁ **Kūṇḍi-mahī-valay-ātiśay-ādhi(dhī)śvaraṁ virōdhi-mahībhṛid-vrāta-kuḷa-vajra-**
pātaṁ bhūtaḷadole Katta-bhū[pa]-

43 n=Aṁgaja-rūpaṁ || [22*] Svasti **Sa(śa)ka-varsha 902neya Vikrama-saṁva-**
tsarad=Āshāḍa(ḍha)d=am[ā*]**vāsyey=Ādivāra**

44 **sūryya-grahaṇa-nimittadol manneyaruṁ Sōla mūvadiṁbarggaṁ Dhanagara**
Kaṁchiyabbe sthāna-bhū-

45 miyaṁ koṭṭu **Suvarṇṇākshi-dēva-tirtthadal=tapaṁ-geyva tapōdhanar=āhāra-**
dhā(dā)nakke **Tribhuvanasiṁgi-pa**[ṁḍi]-

46 **tara** kālaṁ karchchi biṭṭa kamma 500 || Ka || Avaṟ=oḷage Chaṁdradharan=
aṁga-vibhōgakk=eyde nūru **kamma** * * *

47 lam=udbhavam=āgi naḍevud=ā-chaṁdr-ā-vārddhi-tārā-gaṇaṁ divaṁ nilpinegaṁ ||
[23*] Parama-munīśar=pannir * * * [mu]-

48 ktige salva phaḷam=ad=aynūr-kkammaṁ nirutam=ene sarvva-bādhā-parihāram=ad=
oṁdu mane-nivēśana-sahitaṁ || [24*]

49 Nāvidargge(rge) teṁkal=Ākar-ggāvuṇḍara balake mūḍa Tēgūra polakk=āvagade
baḍaga Pālvala bhūv[⏑⏑]

50 paśchimadoḷ=irdda śa(sa)trada vri(vṛi)tti || [25*] Uttama-purushar=Ssōl-
mūvattarkk=adhipar=vviśēsham=enisuva [—]-

51 l=nālvatt-āṟu gēṇoḷ=aḷed=āyattam=enal=māḍi koṭṭud=aṟu-nūr-kkammaṁ || [26*]
Nāvidar=Asagara ma-

52 dhyada bhūmiye[1] tān=āge naḍeva bīdige baḍagal=dēvaṁg=ērige teṁkal dēva-
tapōdhanara śa(sa)-

53 tra-sā(śā)leya gēha || [27*] Ā manege panneraḍu kayyi nīḷamum=eṁṭ=
agalamum=akkuṁ || Vṛi || [— ⏑]-

54 ḷamē **guṇa-prakaradoḷ=Soval=ādiya** mūvadiṁbar=ā pāvana-mūrttigal=subhaṭar=
uttama-dāniga[ḷ=ā]-

55 śritarggc kalp-āvanijar=ss[u*]dāna-nidhi **Kaṁchale**-kānteya biṭṭa dharmmamaṁ
kāvudu tamma vṛittiya [⏑ — ⏑]

56 vol=ā dhare nēsaṟ=uḷḷinaṁ || [28*] Sthān-āchāryyarum=ūruṁ bhūnāthar=kkiḍise
kāvar=ūr=kkiḍisalk=ā [sthān-ā]-

57 chāryyaṁ kāvaṁ sthān-ēśaṁ kiḍise mūvadiṁbar=kkāvaru || [29*] Vṛi ||
Bhūtaḷa-pūtam=appa muni-n[āthara] mu-

58 ktige salva dharmmamaṁ ghātisidaṁge durggati-padaṁ pratipāḷisidoṁge puṇya-
bandh-ātiśay-āspadaṁ

59 sukha-padaṁ śubha-vṛiddhi-jay-āspadaṁ mahā-khyāti-padaṁgaḷ=eṁb=iv=ivu tappavu
Dēvaṇa-paṁdit-[ā]-

60 **graṇī** || [30*] Sāsira pasuvaṁ dvijar=irchchāsiramaṁ kōṭi munigaḷaṁ
koṁda mahā-dōshaṁ[2] porddugum [⏑⏑ ⏑]

61 va sā(śā)sana-dharmmamane kiḍipa mā-pātakanaṁ || [31*] Mēḷisi nāy=aḍagaṁ
Chāṁḍāle kapāḷadoḷe kaḷḷan=eṟed=aḍu-

62 taṁ tā(ta)t-kālade kerppiṁ muchche samāḷōkadoḷ=Iṁdran=ākeyaṁ besa-goṇḍaṁ ||
[32*] Dēva-svaṁ brahma-svaman=āvu * * *

63 nda pātakana pāda-rajaṁ bhāvisal=abhōjyam=enal=ā dēva-svaman=aḷivaniṁ
nikri(kṛi)shṭarum=oḷarē || [33*] Na visha**ṁ** [visha]-

64 m=ity=āhuḥ(r)=dēva-svaṁ visham=uchyatē [|*] visham=ēkākinaṁ hanṭi dēva-svaṁ
putra-pautri(tra)kaṁ || [34*] Sva-datt[ā*]ṁ pa-

---

[1] The syllable *mi* is here used for rhyme (*prāsa*) with *vi*, *va*; this is strictly incorrect, but it shews the popular tendency to change *m* to *v* between vowels.

[2] A false *prāsa*, *sh* with *s*.

65 ra-datt[ā*]ṁ vā yō harēti(ta) vasundharā[ṁ*] [|*] shashṭir=vvarsha-sahaśrā(srā)ṇi viṣhṭā(shṭhā)yām jāyatē krimi[1] || [35*]

66 Bhuvanaṁ vananidhi sura-giri diva-kulam=ina-chaṁdrar=uḷḷinaṁ dharmmam= idududbhavam[2]=āgi naḍege

67 śāsana-kavi-Kamaḷādityа-rachita-kāvy-ādēsha(śa)ṁ || [36*] I(ī) dharmmaman= ūruṁ sthān-āchāryya-

68 num kūdi sva-dharmmadim naḍeyisuva satrakke brāhmaṇiy=aḍuvaḷ || Maṁgaḷa mahā-śrī ||

TRANSLATION.

(Verse 1.) Homage to Śambhu beauteous with the yak-tail fan that is the moon kissing his lofty head, the foundation-column for the beginning of the city of the triple world.

(Lines 2-3.) Being in the sanctuary of the blessed god Suvarṇākshi . . . . . .

(Verse 2.) May the god Suvarṇākshi, lord of the three worlds, whose wondrous pair of blest lotus-feet is ceaselessly touched by the edges of jewelled diadems of demons, mortals, and celestials, grant us welfare!

(Verse 3.) In this region of the land there is a forest of *sal*-trees[3] resplendent with masses of lotuses, with flowering lakes of water-lilies, with budding mangoes, with blossom-bearing kinds of trees named *kosagu*,[4] trumpet-flower,[5] *nēṟil*,[6] *aśōka*,[7] and plantain, with an embellishment (*consisting*) of cuckoos crying in sweet strains *pugal*.[8]

(Verse 4.) The sanctuary there, bright with cascades of water, shall procure without delay salvation for votaries worshipping the brilliant lotuses of the feet of the god Śaṅkara-Svayambhu-Suvarṇamahākshi, who bears all distinction in this world: thus has one who is a shatterer of the conceit of kings of poets praised it.

(Verse 5.) Tigers listen to the preaching of religion without the stirring of a leaf[9]; rose-ringed parrakeets, knowing the chants recited by the stainless holy men because of their constant utterance,[10] sing them by night and by day.

(Verse 6.) A flock of apes fetches with due honour water of aspersions (?) for those who are bathing the god: hence I know not how to praise (*worthily*) the severity of their mortification of the flesh.

(Verse 7.) All the day the cuckoos cry in the woods: "sinner, enter not, *pugal*[11]; man of fierce wrath, enter not, *pugal*; thou who breakest all duties, enter not, *pugal*."

(Verse 8.) At the four sides of the mount there is a clamour, shaking the hills, of chattering rose-ringed parrakeets, of shrilling singing-swans, of murmuring female bees, of madding parrots.[12]

(Verse 9.) Look, all the sapful herbs, like a wand giving magical powers on touching the body, bestow the state of a King of Gods; heavenly nymphs feed this family of holy men.

(Verse 10.) The chief man at the sanctuary within the adepts' domain which is thus described, a celestial tree to dependents, is the great saint **Tribhuvanasiṁha**, a lion to those elephants the families of foes of the tribes of ascetics.

---

[1] Read *kṛimiḥ*.

[2] Read *id=udbhavam*.

[3] The *Shorea robusta*.

[4] The *Pterospermum acerifolium*.

[5] The *Bignonia suaveolens*.

[6] The *Eugenia jambolana* or *Calyptranthes caryophyllata*.

[7] The *Jonesia asoka*.

[8] One of the notes of the cuckoo's song.

[9] *Ele* is here used as an interjection and not in the sense of 'leaf.'—H. K. S.

[10] See above, p. 2, note 5.

[11] On the negative imperative *pugal* see Kittel's Grammar, § 207. 3 (p. 156) and Dictionary, s.v. *al*. There is also a play on the other meaning of *pugal*, i.e. the cuckoo's note.

[12] [*Koṁḍaṁgaḷan=agisuva* is not properly interpreted. It has to be written *kaṁḍaṁgaḷa nagisuva* and translated '(the noise) of black monkeys that excite laughter.'—H. K. S.]

(Verse 11.) There was a goodly consecration when the Dānavas **Māli** and **Sumāli**, who on seeing him became attached to Rāghava's foe, made it; thence arose the adored name of the god **Suvarṇamahākshi**. **Sumāli's** name came to be currently attached to the town. On this account how do they praise it within the bounds of the surrounding land of **Kūṇḍi**!

(Verse 12.) The two kings **Māli** and **Sumāli**, giving to the god the **Thirty of Sōlu** in noble freedom, came in the last period of the Trētā Age, a happy era of welfare.[1]

(Verse 13.) Is there not power in ascetics who observe austerities! bravo! Bearing the body without being subject to the inconvenience of physical pain, feeding on the branches of the wilderness, worshipping Umā's Lord, abiding in salvation while nominally on earth, like a bee at the lotus-feet of the god Suvarṇākshi is that ascetic the blessed **Gaṅgarāśi**.

(Verse 14.) The doctrine of his teaching having entered her ear, with the good thought that the noblest course is to give general largesse to devotees, ascetics, and Brāhmaṇs,—

(Verse 15.) A bee to Hara's lotus-feet, free from the influences of deceit, faultless of body, most brilliant in form, stainless in fame, gracious, inspired by religious charity, devoted to gods and preceptors, purifying her good *gōtra* : in these terms the earth abundantly praises at all times **Kañchikabbe**.

(Verse 16.) She is *(the wife)* of the amiable **Kētimayya, Kari's** son, of **Mārājana-Beḷavāḍi**; an ocean of abounding virtues, a Mēru of godliness, who are there that do not praise this **Kañchikabbe**?

(Verse 17.) **Kañchiyabbe** of the **Dhanagas'** *gōtra*, who practises the virtue of beneficence, a gem of matrons, by the perfection of her eminent religious charities is verily one of the highest order of Māhēśvaras on earth.

(Verse 18.) A double door of Fortune, a column for the Sun's beams, where his rays are freely diffused, it shall indeed abide within the lady Earth for the length of the æon : therefore what a marvel it is!

(Verse 19.) Of **Kañchikabbe**, who is thus illustrious, the son is **Chaṭṭa**, a bee to Śiva's two lotus-feet, devoted to saintly men, a treasure to cultured and agreeable men, a grindstone to dire sin.

(Line 33.) The description of the benefactor.

(Verse 20.) An axe to that great mountain[2] the potent **Chōḷa**, a lion to those elephants the **Lāḷas**, having forsooth the form of a submarine fire to all the oceans *(consisting of)* ways of fastnesses in the waters, mountains, and forests, he who cut off the head of **Ranakambha** and **Kakkala**, a malign meteor portending destruction to foemen's grim lands, an ornament of emperors, is the blest lord of monarchs **Taila**.

(Lines 36-39.) When the victorious reign of—hail!—the asylum of the whole world, favourite of Fortune and Earth, great Emperor, supreme Lord, supreme Master, ornament of **Satyāśraya's** race, embellishment of the **Chāḷukyas**, the Emperor strong of arm **Nūrmadi Tailapa-dēva**, was advancing in a course of successively increasing prosperity, *(to endure)* as long as moon, sun, and stars :—

(Line 39.) One who finds sustenance at his lotus-feet—

(Verse 21.) A son of prince **Kaṇṭheyabhārada Nannapayya**, a sword for arms skilled in defence of that lord of men the Emperor, destroying devices of foes, ornament of the **Raṭṭa** race, crushing the pride of other monarchs, a lord pure of fame, a treasure of discretion, is the elder son named king **Katta**.

[1] ['Came in . . . . . a happy era of welfare' is not intelligible. 'Went to the world of bliss or died would be the literal translation of the phrase *sugati-sukhālayam pokkar*.—H. K. S.]

[2] A play on words : *mahīdhara* means both "mountain" and "king."

(Verse 22.) He is the exalted ruler of the circle of land of **Kūṇḍi**, a thunderbolt-stroke to the whole crowd of those mountains his adversaries, king **Katta**, wearing the form of the Love-god on earth.

(Lines 43-46.) Hail! On **Sunday, the new-moon day of Āshāḍha in the cyclic year Vikrama, the 902nd** (*year*) **of the Śaka era**, on the occasion of an eclipse of the sun, **Dhanagara Kañchiyabbe**, giving to the seigniors and the **Thirty of Sōlu** land for an establishment, laved the feet of **Tribhuvanasingi Paṇḍita** and granted 500 *kamma* for the supply of food to the ascetics observing austerities in the sanctuary of the god Suvarṇākshi.

(Verse 23.) Out of this, one hundred *kamma* . . . shall be effectively applied in due manner for the personal enjoyment of the Moon-bearer [Śiva] for as long as the moon, ocean, stars, and heavens endure.

(Verse 24.) Verily a fruit leading to the salvation of . . . most excellent holy men are these five-hundred *kamma*: hence they, together with one dwelling-house, are immune from all conflicting claims.

(Verse 25.) The estate of the almshouse situate to the south of the (*Quarter of the*) Barbers, east of the special estate of Ākar Gāvuṇḍar, north of the field of Tēgūr . . . on the west of . . . (*is as follows*).

(Verse 26.) Those excellent men the chiefs of the **Thirty of Sōl**, having measured out by the span forty-six . . . as a special (*estate*) and caused it to be prepared, shall give six-hundred *kamma*.

(Verse 27.) To the north of the road by which one walks within the land[1] between the (*Quarters of the*) Barbers and the Washermen, to the south of the god's tank, is the building of the almshouse for the ascetics of the god.

(Line 53.) Of this house the length is to be twelve cubits and the width eight.

(Verse 28.) . . . in the multitude of their virtues the leading **Thirty of Soval**, they who are pure of body, valiant, supremely generous, trees of desire to dependents, shall preserve the pious foundation granted by the lady **Kañchale**, that treasure of bounty, as if it were . . . of their own estate, so long as this earth and sun exist.

(Verse 29.) The priors of the establishment and the town jointly shall protect (*the foundation*), if princes do harm; if the town harm it, the prior of the establishment shall protect it; if the head of the establishment do harm, the Thirty shall protect it.

(Verse 30.) For him who injures the pious foundation serving for the salvation of . . . holy men which purifies the earth[2] (*there shall be*) a state of misery; for him who preserves it, a most exalted condition caused by the effect of his merit, a state of happiness, a condition of felicity, increase, and success, states of great reputation: these, these are inevitable, O thou eminent scholar **Dēvaṇa**.

(Verse 31.) The great guilt of slaying a thousand kine, two thousand Brāhmaṇs, (*and*) a crore of holy men will accrue to the deadly sinner who injures a . . . pious foundation (*established*) by edict.

(Verse 32.) On seeing how the Chāṇḍāla woman, having mixed dog's flesh in a human skull and poured (*over it*) toddy, was covering it with a leather shoe at the time while cooking it, Indra questioned her (*as to the reason for covering it*).[3]

---

[1] *Rhūmiye* seems to be an instrumental (see above, Vol. XIV, p. 277, note 9). In the *siddhi* sense of "distance within which": see Kittel, *Gram.*, § 347. 5 (p. 383).

[2] Apparently an inverted *bahu-vrīhi*; see Pāṇini II. ii. 37.

[3] On this legend see *Ep. Carn.*, Vol. 1, introd., p. 31, and ib. TN. 63.

(Verse 33.) (*She answered that her food was*) unfit to eat, if touched by dust from the feet of the sinner who should have appropriated the estates of gods and Brāhmaṇs : hence are any more degraded than he who infringes a god's estate ?

(Verses 34-35 : two common Sanskrit formulæ.)

(Verse 36.) So long as the earth, the ocean, the celestial mountain, the abode of the sky, the sun and moon exist, may this pious foundation, whereof the versified regulations have been composed by Kamaḷāditya, poet of edicts, continue in effect.

(Lines 67-68.) For the almshouse, in which jointly the town and the prior of the establishment shall religiously maintain in operation this pious foundation, a Brāhmaṇ woman shall be the cook. Happiness ! great fortune !

No. 2.—MAHOBA PLATES OF PARAMARDI-DEVA: (VIKRAMA-)SAMVAT 1230.

By Rai Bahadur Hiralal, B.A., Jubbulpore.

These copper-plates were found in the well-known Mahobā town of the Hamirpur District in the United Provinces of Agra and Oudh, while digging for earth to build a house. They were deposited in a stone chest about 30′ below the surface. The two plates were strung together with a ring having a seal, which the finder took for a lock and broke. From the figure of Gaja-Lakshmī (Goddess of Wealth) in the middle of the first four top lines it was inferred that the record dealt with some hidden treasure, for which a search was strenuously made, of course to no effect. A few Sanskritists were then taken into confidence to find out the contents of the record, with a view to locating the exact spot of the treasure trove ; but, as none could decipher it, it was decided, with great reluctance, hesitation and misgivings, to seek the aid of an epigraphist, and the choice fell on me. The record was therefore sent to me in charge of a Pandit confidant, who on my telling the contents declared that he had at the time of starting made astrological calculations and had already come to the conclusion that his efforts were to end in disappointment. These plates have thus had a very narrow escape from a perpetuation of the internment which they have undergone for the past three years after their actual discovery.

The plates measure 13″ × 10″ and weigh 272 *tolas*, or a little less than 7 lbs. The rims are bordered with separate copper strips about a quarter of an inch in breadth, secured with nails. Only one strip of the second plate has disappeared. Having been deposited underground for centuries, the plates were naturally covered with green verdigris; but on cleaning them the record was found in a good state of preservation. The language of the text is Sanskrit. Altogether 33 lines are engraved with letters belonging to the northern class of Nāgarī alphabets, their average size being half an inch. The record is clearly written; but the engraving is not altogether faultless, as some strokes or limbs of letters have been omitted; for instance, in line 16 कृष्ण is engraved as कृष्ण, where *sh* is turned into *p* by the omission of the inside stroke which distinguishes the two letters. Similarly in line 26 we find विडङ्गम for विहङ्गम, the distinguishing hind stroke of *ha* being left out. There are several such slips. The last portion of line 30 was so carelessly written that it had to be re-engraved. There is very little difference in the formation of *va*, *dha*, *ra* and *cha*, so that one can be mistaken for the other. *Ba* is not at all distinguished from *va*. There are also some spelling mistakes, which will be found corrected in foot-notes. The writing is, however, bold and well executed by one Pālhaṇa, who carved the Semrā plates[1] some seven years previous to this record.

[1] *Ep. Ind.*, Vol. IV, pp. 153 *et seq.*

He then called himself a *pītalahāra*, or brass-worker, corresponding to the present-day *tamerā* (*tāmrahāra*). Five years later he called himself *śilpin* (artist), and two years' further experience of this sort of work developed him into a *vijñānin* (skilful artist), a title which he has prefixed to his name in our record, though a comparison with the Semrā plates does not indicate any marked improvement either in the formation of letters or in accuracy of spelling. The composer of the record was one Pṛithvīdhara, a Vāstavya Kāyastha, the same[1] who wrote the Semrā and Ichchhawār plates, with which the phraseology of our record in formal portions exactly corresponds. The scribe appears to have belonged to the same family which furnished a Counsellor and Chamberlain to the king referred to in our record and of which a later representative governed the fort of Ajaigarh, while another became the Superintendent of king Bhojavarman's Treasury.[2]

Our *tāmrapaṭṭa*, as it is named at the end, records the grant of some land in Dhanaura village, included in the Ērachha District, to one Ratanaśarman Brāhman, son of Vīhlē *Dvivēdin*, grandson of Chhiṅgala and great-grandson of Yaśaḥ of the Śāṅkṛitya *gōtra*, who had come from what reads as Phauḍiva-Bhaṭṭa-āgrahāra, by the Chandrātrēya or Chandella king Paramardi-dēva, Lord of Kālañjar. The grant was made on Tuesday the 4th day of the dark fortnight of Māgha in the Vikrama-Samvat 1230, which regularly corresponds to Tuesday the 25th December 1173 A.D.,[3] when the donor was encamped at a village named Gahilū. The day was a holy one, the sun having entered the zodiacal sign Makara on that date. The king, having bathed with water brought from holy places, worshipped the Sun and the lord of Bhavānī (*i.e.* Śiva) and duly made the gift.

The record gives no information concerning the Chandella dynasty which is not already known. It mentions four ancestors of the donor, *viz.* :—Madanavarma-dēva, Pṛithvīvarma-dēva, and the two heroes Jayaśakti and Vijayaśakti, who are regarded as the real founders of the Chandella dynasty and who gave their names to the Chandella kingdom, as Jējāka-bhukti, latterly corrupted into Jajhauti. The first king of this dynasty is said to have been Nannuka, grandfather of Jaya and Vijaya. To him is ascribed a date about 830 A.D., and from numerous epigraphs it is clear that his descendants continued to rule with extended kingdom down to 1288 A.D., when Bhōjavarman, the 21st king in the line, was on the throne. The successor of Bhōjavarman is not known; but from a Satī record[4] which I found in a village named Bamhnī of the Damoh District it appears that the last king of this dynasty was Hammīravarma-dēva, who apparently held sway until 1309 A.D. The Bamhnī record is dated in Samvat 1365,

---

[1] See his Ichchhawār plates, *Indian Antiquary*, Vol. XXV, p. 208.

[2] *Ep. Ind.*, Vol. I, pp. 331 *et seq.*

[3] Dewan Bahadur Swamikkannu Pillay, M.A., LL.B., I.S.O., has since kindly verified the date and found it correct.

[4] This record was found just three weeks after the Mahobā plates were brought to me ; it reads as follows :—

परमभेटारकेणाधिराजवलीत्रयोपेत काली-
ज्यराधिपति श्रीमद हंमीरवर्म्मदेव: विजयराज्ये
संवत् १३६५ समये महाराजपुत्र श्री वा-
घदेव भुज्यमाने अस्मिन काले वर्त-
माने(:)ब्रह्मणीग्रामे भूमिपुत्र
पाल्हण भार्जा मल्हे संतम हथुसीधि
पुत्र जामे पटुमणक्कत्रा: पं जेपाल लिखितोस्ति

The writer Pandit Jayapāl, who composed the record, was apparently a village Pandit with a smattering of Sanskrit, so that he could neither compose nor spell correctly ; but he has succeeded in expressing what he intended to record.

or A.D. 1308. At that time portions of the Damoh and Jubbulpore Districts were governed by a *Mahārāja-putra* Vāghadēva with head-quarters at Siṅgorgaṛh in the Damoh District. He appears to have been a Parihār[1] Chief who had accepted the supremacy of Chandella kings. In a village named Salaiyā, 3 miles from Bamhnī, there are two Satī records,[2] one dated in A.D. 1304 and the other in A.D. 1309, the former erected during the reign of Vāghadēva and the latter in that of Alā-ud-dīn, indicating that the Parihār Chandella rule had come to an end in A.D. 1310, through the Muhammadan invasion. We know from other sources that it was about this time that Alā-ud-dīn sent to the Deccan his army, which established a footing in Bundelkhand, ousting the previous dynasties.

With regard to the geographical names, Ērachha is the well-known Erich on the Betwa river, which gave its name to the surrounding district. It is about 60 miles from Mahobā. The village Dhanaurā, from which grants were made, is represented by a village of the same name, with its final vowel lengthened. The present village Dhanaurā is 11 miles from Ērachha. Gahilū, where the king was encamped, is apparently Gahuli, about 10 miles north of Dhanaurā. I cannot trace the village from which the family of the donee had originally come. As the grant refers to pieces of land and not to the whole village, the boundaries are described by local *nālās*, ponds and fields, which it is now fruitless to trace.

---

[1] A Satī record in Pātan (District Jubbulpore) reads as follows :—

संवत १३६१ समये प्रतिहार रा श्री वाघदेव भू-
जमाने ततकाल कायस्थ पं. अत्थार (?)(धा) वृह्म यथा न-
र्मदा तीर्थे प्रसति तीद्रिम (?)ग्रामे समाक्रने
जगहथ उध्रतं माघ वदि १३ सुक्रे

Mark the word प्रतिहार in the first line and compare the tradition that Parihār kings ruled in Siṅgorgaṛh, as recorded by General Cunningham in his Archeological Report, Vol. IX, p. 49. Also see Hiralal's *Damoh Dīpaka* (Damoh District Gazetteer in Hindi), pp. 108 and 109. It may be noted here that Pātan, where the present record exists, is only 20 miles from Siṅgorgaṛh. The date of the record regularly corresponds to Friday, the 15th February, 1303 A.D., as calculated by Dewan Bahadur S. K. Pillay.

[2] One of them is lying on a hillock and reads as follows :—

संवत १३६२ समये चैत्र
सुदि २ सोमे महाराज-
पुत्र श्री वाघदेव भुज्यमा-
ने वलियाखे गामे(:) पटगी-
ल्हण सुत मामे काल भव-
ति भार्ज ताल्हा महासती
भवंति(:) सुत चौहउनानि-
म कीर्ति पालयै: प० ऊपाल
लिखितोस्ति: भडमामो
श्री लउटनाम्वे गढ़ोस्ति

The date of the record regularly corresponds to Monday, the 9th March, 1304 A.D.

The second one, lying in a field, reads as follows :—

संवत १३६६ समये अलयदीन सुताना राज्य वलिअखेट ग्रामे

Both the stones are put on the borders of a deserted village, arhaiya kheda, which is identical with Baliakheta of the above-quoted inscriptions.

That Vāgha-dēva's rule subsisted till Samvat 1366 is apparent from a Satī record of that year, found at Siṅgorgaṛh itself. (See *Damoh Dīpaka*, p. 109.)

TEXT.[1]

First Plate.

1 ओं[2] स्वस्ति ॥ जयत्याह्लादयन्विश्वं विश्वेश्वरशिरोधृतः । चन्द्रात्रेयनरेन्द्रा-

2 णां वंशश्चन्द्र इवोज्ज्वलः ॥ तत्र प्रवर्द्धमाने विरोधिविजयभ्राजिष्णुजयश-

3 क्तिविजयशक्त्यादिवीराविर्भावभास्वरे परमभट्टारकमहाराजाधिरा-

4 जपरमेश्वरश्रीपृथ्वीवर्म्मदेवपादानुध्यातपरमभट्टारकमहाराजाधिरा-

5 जपरमेश्वरश्रीमदनवर्म्मदेवपादानुध्यातपरमभट्टारकमहाराजाधिराजपरमेश्वर-

6 परममाहेश्वरश्रीकालञ्जराधिपतिश्रीमत्परमर्द्दिदेवो टिं(वि)जयी ॥ स

7 एष दुर्व्विषहतरप्रतापतापितसकलरिपुकुलः कुलवधूमिव वशं(सु)न्धरान्निराकुलां परिपा-

8 लयन्नविकलविवेकनिर्म्मलोक्षतमतिः । एरक्छविषयान्तःपातिधनौरग्रामोपगतान्ब्रा[3]ह्म-

9 णानन्यांश्चाधिकृतान्महत्तमा[4]दीन्समो(म्बो)धयति समाज्ञापयति चास्तु वः समुदितं यथोपरिलि-

10 खितेस्मिन्ग्रामे साधऊर्द्ध्वा भूतभविष्यद्वर्तमाननिःशेषादायसहिता प्रतिषिद्धचाटादिप्र-

11 वेशा वाधगत्या मोरटे[5] पादोनद्रोण[6]चतुर्वृ(ष्ट)यधरिकलिता प्रस्थप्रत्येकवाध-[7] व्यवस्थया दैर्घ्ये

12 वाध १० विस्तरे वाध ६ जातवधि(वाध)षष्ट्यन्विता पूर्व्वस्यां दिशि नापितसत्कनाला दक्षिणस्यां दिशि

13 नाला पश्चिमायां दिशि भतहडपुष्करिणीभीटु । उत्तरस्यां दिशि ब्रा(ब्रा)ह्मणभूमि । तथा भीटीपुष्क-

14 रिणी । एतैराघाटैर्व्विसि(शि)ष्टा । तथा वासकृते उभयद्विपञ्चास(ग्र)द्धस्त-प्रमाणया भूम्या सह पञ्च-

15 हलावच्छिन्ना भूमिरस्माभिः गहिलूयामसमावासे त्रिंशदधिकशतद्वयोपे-

---

[1] From the original plates and impressions kindly taken by Rao Sahib Krishna Sastri, B.A.

[2] Expressed by a symbol.

[3] Read °ह्मा°.

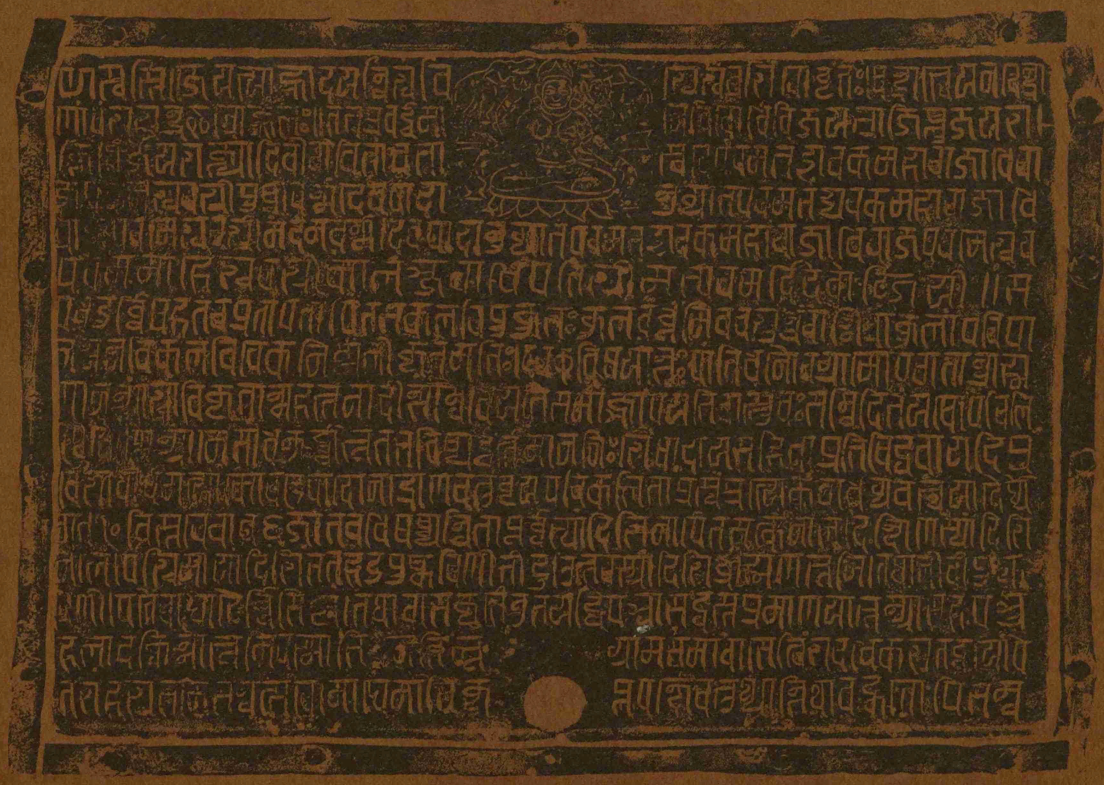
[4] The present-day महतौ, the headman in lower castes.

[5] मोरट is a kind of plant with sweet juice. Apparently it flourished in a special kind of soil, to which it has given its name, now corrupted into मोरंड.

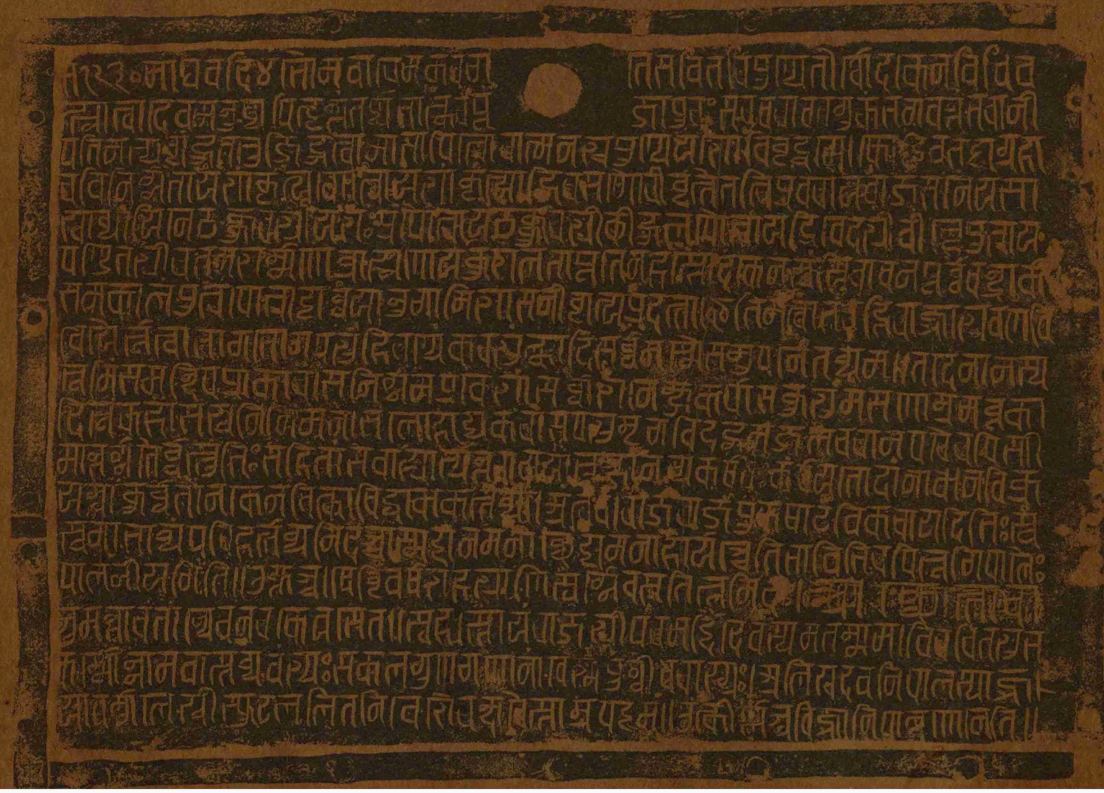
[6] द्रोण is a measure containing 16 *prasthas*. द्रोणचतुष्टय would therefore be 64 *prasthas*, which, पादोन or less by a quarter of a द्रोण or 4 *prasthas*, is equal to 60 *prasthas*. This correctly gives the calculation further on described as 'प्रस्थप्रत्येकवाधव्यवस्थया जातवाधषष्ट्यन्विता,' that is, 60 *vādhas* of land according to the rule of one *prastha* for every *vādha*. Here the first phrase indicates the seed capacity and the latter the area of the land granted.

[7] Apparently a *vādha* of land had a seed capacity of one *prastha* only.

i.



ii.



16 तथहस्रतमे[1] सम्वत्सरे । माघे मासि कृष्ण(ष्ण)पक्षे चतुर्था(र्थ्या)-
न्तिथावङ्कतोपि सम्व-

Second Plate.

17 त(त्) १२३० माघ वदि ४ भौमवारे मकरगते सवितरि पुण्यतीर्थोद-
केन विधिव-

18 त्स्नात्वा देवमनुष्यपितॄन्संतर्प्य भास्करपूजापुरःसर(रं) चराचरगुरुं भगवन्त
भवानी-

19 पतिमभ्यर्च्य हुतभुजि हुत्वा मातापित्रोरात्मनश्च पुण्ययशोविवृद्धये फोडिव-
भट्टायग्रहा-

20 रविनिर्गताय शांकृत्यगोत्राय शांकृत्याङ्गिरसगौरोहृत्तेत(ति)त्रिप्रवराय वाजस-
नेयसा(शा)-

21 खाध्यायिने ठक्कुरश्रीयशःप्रपौत्राय द्विवेद(दि)श्रीवील्हेपुत्राय

22 पण्डितश्रीरतनशर्म्मणे ब्रा(ब्रा)ह्मणाय कुशलतापूतेन हस्तोदकेन स्वस्तिवाच-
नपूर्व्वं(र्व्वं) चन्द्रार्क-

23 समकालं पुत्रपौत्राद्या(द्य)न्वयानुगामिशासनोद्गा(क्ष)त्य प्रदत्ता । इति मत्वा
भवद्भिराज्ञाश्रवणवि-

24 धि[2]यैर्भूत्वा भागभोगपशुहिरण्यं करशुल्कादि सर्व्वमस्मै समुपनेतव्यम(म)
तदेनामस्य

25 भूमिं समन्दिरप्राकारां सनिर्गमप्रवेशां सर्व्वाश(स)नेक्षुकर्पासकुश(सु)मसणाम्र-
मधूका-

26 दि[3]भूरुहां सखनिनिमना(न्नां)[4] सलोहाद्या(द्या)करां सपशुमृगविड(ह)ङ्गमजलच-
रामपरैरपि सी-

---

[1] Read सहस्रतमे.

[2] Read धै.

[3] This phrase also occurs in the Semrā plates (*Ep. Ind.*, Vol. IV, facing p. 167) and was read by Dr. Cartellieri as सर्व्वाशनेक्षुकपीससणाम्रमधूकादि (*Ibid*, p. 169) and corrected as सर्व्वासवेक्षुकपीतशणाम्रमधूकादि. He translated it as "*asanas*, shoots of sugar-cane, hemp, mangoes, *madhūkas* and so forth" (*Ibid*, p. 156). The correct interpretation is "*sāl* (*Shorea robusta*), sugar-cane, *cotton tree*, hemp and *mahua* (*Bassia latifolia*)," to which our inscription adds *kusuma* (*Schleichera trijuga*), which produces most valuable lac. It would appear that the trees or plants mentioned are those which produced most valuable articles, *sāl* giving the best timber for buildings, sugar-cane materials for manufacture of sugar, cotton tree for cotton, *śana* or hemp for ropes, and *mahua* for food, oil and liquor. What seem to be omitted are poppy and *gañja* plants, which might have been associated with *mahua*, though the latter's importance is so great that none others can claim a mention on anything approaching an equality to it. The *Indian Forester* (June 1917) remarks: "Truly the *mahua* among the forest trees stands equally for idealism and utilitarianism. In the *mahua* flowers exists acetic acid, and acetone is one of the primary ingredients of cordite, the chief explosive used in the guns which are thundering on different battle fronts in Europe."

[4] In the Semrā plates (*Ep. Ind.*, Vol. IV, facing p. 167) the phrase reads as सवनखविनिमनान्, which Dr. Cartellieri read as सवनखर्वाभनिधानान् (*Ibid*, p. 169); but it seems clear that what was intended to be written was सवनखनिनिम्नान् (together with forests, mines and hollows).

27 मान्तर्गतैर्व्वस्तुभिः सहितां सवाह्याभ्यन्तरादायां भुञ्जानस्य कर्षतः कर्षयतो दानाधानविक्र-

28 यम्वा कुर्व्वतो न केनचित्काचिद्बाधा कर्त्तव्या । अत्र च । राजराजपुरुषाटविक[1]-चाटादिभिः स्वं

29 स्वमाभाव्यं परिहर्त्तव्यमिदञ्चास्मद्दानमनाक्षेप्यमनाहार्यञ्चेति भाविभिरपि भूमि-(मि)पालैः

30 पालनीयमिति ॥ उक्तञ्च ॥ षष्टिवर्षसहस्राणि[2] स्वर्गे वसति भूमिदः । आच्छेत्ता चा-

31 नुमन्ता च तान्येव नरके वसेत(त्) ॥ स्वहस्तोयं राजश्रीपरमर्द्दिदेवस्य मतम्मम । विरचितशुभ-

32 कर्म्मोन्नामवास्तव्यवंश्यः सकलगुणगणानां वेश्म पृथ्वीधराख्यः । अलि-खदवनिपालस्यान्न-

33 या धर्म्मलेखो स्फुटललितनिवेशैरक्षरैस्तास्रपट्टम् । उत्कीर्णञ्च विज्ञानि-पाल्हणेनेति ॥

ABSTRACT.

(Ll. 1-2.) Victory to the moon, the progenitor of the Chandrātrēya family of kings.

(Ll. 2-6.) Victorious is the king **Paramardi-dēva**, Lord of **Kālañjara**, who meditates on the feet of **Madanavarma-dēva**, who meditates on the feet of **Pṛithvivarma-dēva**, born in the family of the heroes **Jayaśakti** and **Vijayaśakti**.

(Ll. 7-8.) His valour harasses his enemies. He protects the earth as if she were a noble lady, and his wisdom is purified with discrimination.

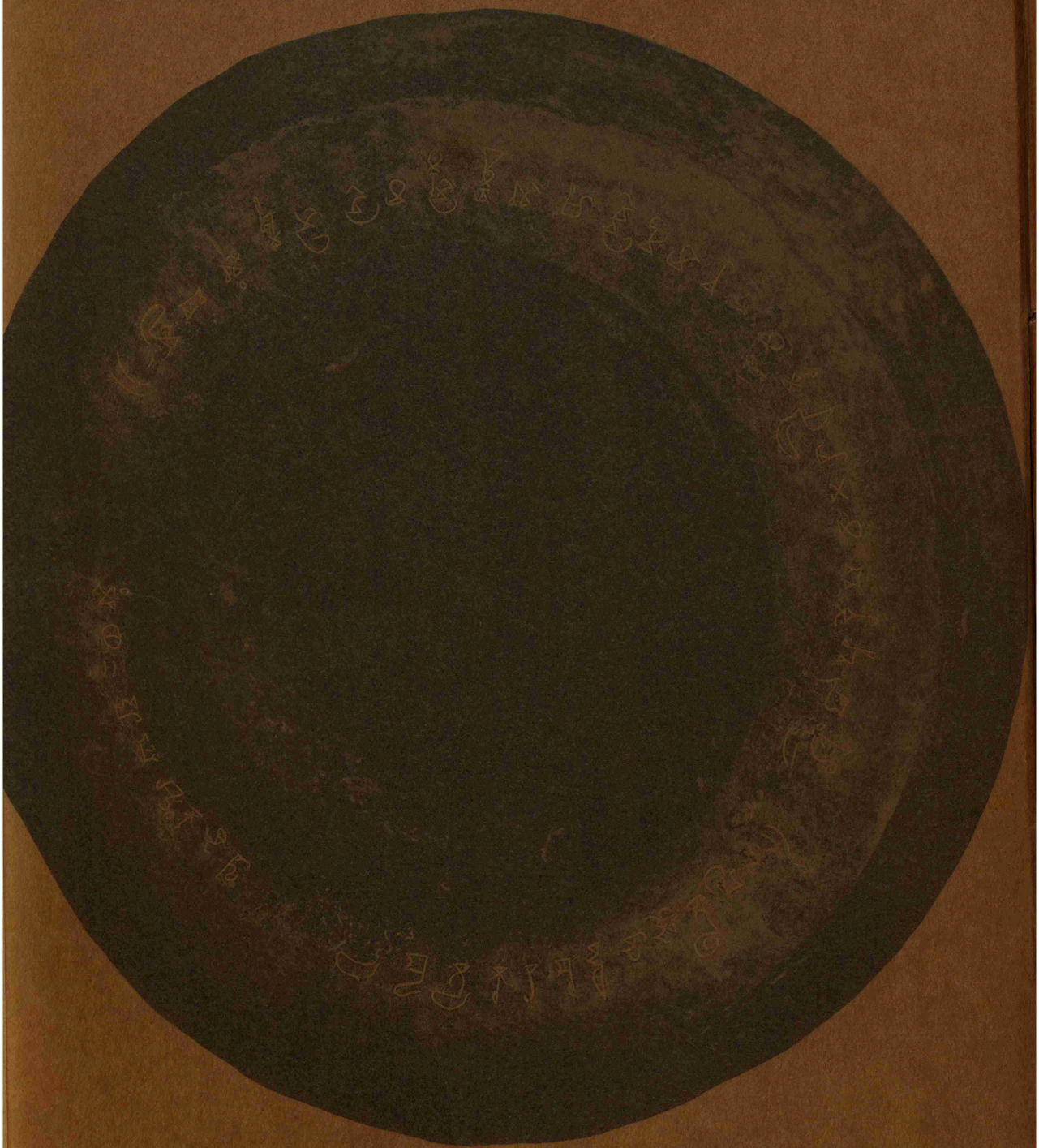
(Ll. 8-23.) Having called the Brahmans, headmen and other officers of the village **Dhanaura** in the District of **Ērachha**, he states that in that village land measuring 10 × 6 or 60 square *vādhas* cultivable by five ploughs, and bounded on the east by the *nālā* belonging to the barber, on the south by a *nālā*, on the west by the embankment of the **Bhatahaḍa tank**, on the north by a Brahman's land and tank embankment, and also a square of 52 cubits of land for a dwelling-place, has been given by him at Camp **Gahilū** to Pandit **Ratanaśarman** (whose forefathers had come from **Phoḍiva-Bhaṭṭa-āgrahāra**) on a **Tuesday the 4th of the dark fortnight of Māgha in Vikrama Samvat 1230**, when the sun had entered the zodiacal sign **Makara**.

(Ll. 23-28.) Therefore the donee should be obeyed, and cattle, gold and taxes, etc., should be paid to him and no molestation caused by anybody in the enjoyment of land given along with the temple and mansion, with the rights of easement, with trees, such as *sāl*, sugar-cane, cotton tree, *kusum*, hemp, mango, *madhūka*, etc., with forests, mines, hollows and quarries of iron, etc., with animals, deer and birds, aquatic or otherwise, and other objects within the boundaries.

[1] आटविक denotes 'wild tribes.'

[2] Read सहस्राणि.

Shorkot Inscription of the year 83.



F. W. THOMAS

SCALE TWO-FIFTHS

WHITTINGHAM & GRIGGS, COLL.

(Ll. 28-30,) Moreover the rights of the king, state officers, forest tribes, soldiers, etc., shall cease and the future kings shall protect this gift as inalienable.

(Ll. 30-31.) Here follows a common admonitory verse.

(Ll. 31-33.) Given under his own hand by the illustrious Paramardi-dēva. Composed by Pṛithvīdhara of a family resident in the village and carved by Pālhaṇa.

No. 3.—SHORKOT INSCRIPTION OF THE YEAR 83.[1]

By J. Ph. Vogel, Ph.D.

This inscription is engraved round the shoulder of a copper cauldron, found together with about a dozen other utensils at Shōrkōṭ in the Panjāb on the 8th September 1906.

The size of the letters may be defined as follows:—Simple *aksharas* measure from ¼ in. to ⅜ in. in height, and ligatures (including vowel marks) average about 1 in.

TRANSCRIPT.

Saṁ 80+3 Māgha-śukla-di 5 [vai*]yābṛityakara-Buddhadās-ōtthāpi[ta] || Śibipur-ōpavana-Rādhika-vi[hā]ra-chāturdiśa-sarvbāstīvādi-bhikshu-saṁghasya ||

TRANSLATION.

"In the year 83, in [the month] Māgha, the bright fortnight, the fifth day, dedicated by the *vaiyābṛityakara* Buddhadāsa to the universal congregation of friars of the Sarvāstivādin sect at the Rādhika Convent in the park of Śibipura."

Notwithstanding its brevity, this epigraph presents several points of interest. As regards its date—the first point to be discussed—there prevails some uncertainty owing to the circumstance of the era to which it refers not being specified. We have, therefore, to choose between the following three possibilities: first, the date refers to the reign of some ruler; second, it refers to the Lōkakāla or Saptarshi era; third, it refers to the Gupta era.

The first assumption may be safely discarded, because, firstly, no king's name is mentioned, and, secondly, the year 83 would point to a reign of almost incredible length.

That in the Shōrkōṭ inscription the Lōkakāla should have been employed seems also very unlikely, as long as there is no proof forthcoming of this era having been used as extensively in the Plains of the Panjāb as we know was the case in the Hills. We are consequently led to assume that the era used in this inscription is the Gupta era—an assumption which fits best with the palæographical evidence. As the initial year of this era must have corresponded to the period from the 9th March A.D. 319, to the 25th February A.D. 320,[2] the date of our inscription, if referred thereto, must have fallen about the beginning of the Christian year 403. Now it will be seen that the character used agrees most closely with that found in Gupta inscriptions of the 5th century of our era. Special attention may be drawn to the peculiar

---

[1] A preliminary note on this inscription has been published in the *Journal of the Panjāb Historical Society*, Vol. I, p. 174, under the title "Shorkot, the ancient Sibipura."

[2] *Cf.* J. F. Fleet, *Corpus Inscr. Ind.*, Vol. III, *Inscriptions of the early Gupta kings*, Introduction, p. 127.

shape of the *aksharas ma* and *sa*. On account of the script it is out of the question that any other known era can have been used here.

The chronological question having thus been satisfactorily settled, we must turn our attention to the word following the date, which I read *vaiyābṛityakara*. It will be noticed that the four *aksharas bṛityakara* are perfectly plain. The *akshara* preceding *bṛi* has the appearance of a ligature of which the second component is *ya*; it may perhaps be read *yā*. Between this character and the figure indicating the day there is an open space; apparently one or two *aksharas* have been effaced. Now as the word under discussion is immediately followed by the donor's name *Buddhadāsa*, there can be little doubt that the syllable *vai* has been lost and that we are justified in reading *vaiyābṛityakara*. This term occurs in Sanskrit writings of the Buddhists in the two forms *vaiyāvṛityakara* and *vaiyāpṛityakara*, the latter being the correct one.[1] The word corresponds to the Pali *veyyāvachchakara*, meaning "one who does business or executes a commission for another, an agent."[2] I suspect, however, that in the Shōrkōṭ inscription it has a more restricted meaning and may denote some functionary—either *bhikshu* or *upāsaka*—in connection with a Buddhist monastery. I am led to this assumption not only by the position of the word in the inscription, but also by the connection in which it occurs in the *Mahāvyutpatti*, where it immediately follows *navakarmika*.[3] As I am unable to define its meaning more precisely, I have chosen in my version of the inscription to leave it untranslated.

A point of special interest for the topography of the Panjāb is the mention of Śibipura, from which we may infer that the mound of Shōrkōṭ marks the site of the capital of the Śibis, a well-known tribe of ancient India. The Śibi *rājā* who bestowed his eyes upon a blind Brahman and gave away his own flesh to ransom a dove from a hawk is celebrated as the paragon of charity and self-sacrifice in both Brahmanical and Buddhist legend. The Śibi tribe is repeatedly mentioned in the *Mahābhārata*; but these references do not enable us to decide on the geographical position which they occupied beyond that they lived somewhere in the western region. In the course of the conquest of the world (*dig-vijaya*) ascribed to the Pāṇḍavas it is related that Nakula, the fourth of the five brothers, while engaged in subduing the western region, overcame the Śibi, Trigarta, Ambashṭha, Mālava and Pañchakarpaṭa.[4] It should be remembered that the Trigarta country corresponds to the Kāngṛā Valley.

A famous episode[5] of the great epic relates how Jayadratha, the king of Sindhu, attempts to carry off Draupadī, the common spouse of the five Pāṇḍavas. Here the Śibis are mentioned as a tribe dependent on Sindhu.

Among the tribes of the Panjāb subdued by Alexander, the Greek authors mention the Siboi, in whom Lassen has recognized the Śibi of Indian literature.[6] Owing to the circumstance that they were armed with maces and wore skins of animals for clothing, the Greeks took them to be descendants of Herakles and his companions. Arrian somewhat vaguely locates them in the country between the Indus and Akesines (*i.e.* the Chandrabhāgā or Chināb);

[1] Śāntidēva's *Śikshāsamuchchaya* (ed. Bendall), p. 55; *Divyāvadāna* (ed. Cowell and Neil), pp. 54 and 347; *Mahāvyutpatti* (ed. Minayeff), Bibl. Buddh., XIII, 270, 22. For *vaiyāvṛitya* cf. *Avadānaśataka* (ed. Speyer), Vol. I, p. 260, II, pp 9, 13, 96.

[2] R. C. Childers, *Dict. of the Pali Language*, s.v. *veyyāvachcham*, "service or duty performed by an inferior for a superior." *Cf.* also Kern, *Manual of Indian Buddhism*, p. 84. "The function of a proxy or agent, *Veyāvachchakara*, may be held by an inmate of the monastery (*ārāmika*) or a layman."

[3] This term occurs in several inscriptions from the North-West of India.

[4] *M. Bh.*, II, 1189 (= Bombay ed. II, 32, 7).

[5] *M. Bh.*, III, 15626 (= Bombay ed. III, 266, 11), and III, 15718 (= Bombay ed. III, 271, 3).

[6] Lassen, *Indische Altertumskunde*, Vol. I, p. 644, and II, p. 168. Vincent A. Smith, *Early History*, 3rd ed., sketch map facing p. 94, locates the Śibi in the Doab of the Hydaspes and Hydraotis (*i.e.* the Irāvatī, modern Rāvī).

but according to Curtius they were situated not very far from the confluence of the Hydaspes (*i.e.* the Vitastā, modern Jehlam) and the Akesines. This agrees very nearly with the position of Shōrkōṭ.

Sir Alexander Cunningham[1] in his account of Shōrkōṭ notes that according to the local Brahmans "the original name of the place was *Shivanagari* or *Sheopur*, which was gradually contracted to *Shor*." Thus we see that some reminiscence of the ancient name has been preserved down to the present day. In its correct form, Śibipura, we find it in the inscription here under discussion. The ancient name Śibipura has become contracted to the modern form *Shōr*, to which the word *kōṭ* (=a fort) has been added in the same way as has happened with the names of other towns of the Panjāb. Well-known instances are Siāl-kōṭ (in which *Siāl* is probably derived from *Sāgala*), Paṭhān-kōṭ (*Paṭhān* probably from *Bhatishṭhāna*) and Nagar-kōṭ (in which *Nagar* means "the Town").

It further appears from the inscription that the spot where the metal vessels were found more definitely marks the site of the Rādhika Convent, which must have been situated in a park (*upavana*). Most probably this convent stood outside the walled city, as was usual in the case of Buddhist monasteries in India.

Finally it should be noticed that the Shōrkōṭ inscription confirms the prevalence of the Sarvāstivāda sect in the north-west of India. Several other epigraphical records bear testimony to the importance of the sect: one of them is the inscription on the famous relic casket of Kaniṣhka discovered at Shāhjī-kī-Ḍherī near Peshāwar in March 1909.[2] From the accounts of the Chinese pilgrims it is, moreover, evident that the influence of the Sarvāstivādins was by no means restricted to this part of India. While discussing the data supplied by the Chinese pilgrim I-tsing regarding the geographical extension of this school, Professor Takakusu remarks[3]: "It flourished in Central and North India, and had some followers in East and West India, but it seems to have had very few adherents in South India, and was entirely absent in Ceylon. In Sumatra, Java, and the neighbouring islands almost all belonged to this school, and in China all the four sub-divisions of it were flourishing. Even in Champa a trace of it was found. No other school, so far as we can ascertain, ever flourished so widely as the Sarvāstivāda, either before or after the seventh century; though its adherents in India alone, in Hiuen Tsiang's time, were not so numerous as those of the other schools."

No. 4.—BHAMODRA MOHOTA PLATE OF DRONASIMHA: THE YEAR 183.

By Lionel D. Barnett.

The following inscription was originally published by Mr. A. M. T. Jackson in the *Journ. Bombay Br. R. A. S.*, Vol. XX, No. LIV, pp. 1 ff., but without any facsimile. At the instance of the late Dr. Fleet Mr. D. R. Bhandarkar kindly sent me an excellent ink-impression, from which I now publish the text anew, together with a plate.

Mr. Jackson reports that the plate containing the present inscription, together with another charter, was found "buried in a field in the village of Bhamodra Mohota near Bhaunagar[4] in the year 1895," and was acquired by Mr. L. Procter Sims, engineer of Bhaunagar State. It is slightly irregular in shape: the maximum height is $6\frac{3}{16}$ in., the maximum breadth

[1] *A. S. R.*, Vol. V, pp. 97 ff., and *Ancient Geography of India*, Vol. I, p. 133. Cunningham's identification of Shōrkōṭ with Alexandria Soriana is to be discarded.

[2] *A. S. R.* for 1908-9, p. 51, and for 1909-10, p. 136.

[3] I-tsing, *A record of the Buddhist religion*, transl. by J. Takakusu, Oxford, 1896, p. XXII.

[4] The only village with the name of Bhamodra that I can trace is some distance from Bhaunagar. It lies 16 miles nearly east from Kundla, in lat. 21° 23′ and long. 71° 37′.

1 ft. 2 in. It is in perfect preservation.—The character is similar to that of other plates of the same locality and period, but is more angular, as will be seen by comparison with *e.g.* the five grants published in Vol. XI of this journal, pp. 104 ff., and notably with No. IV, pp. 114 ff.[1] The *jihvāmūlīya* sign is found in *Drōṇasiṁhaḥ* (l. 1) and *pradiśataḥ* (ll. 6-7), the *upadhmānīya* in *bhagavatyāḥ* (l. 3) and *mātā-pitrōḥ* (l. 3). Twice, in *anumōdōyur* (sic!), l. 7, and *mōdati*, l. 9, we find an archaic type of ō attached to *m*, while elsewhere the ordinary form of the vowel is used. The numerals for 100, 80, 3, 10, and 5 occur on l. 11.—The language is Sanskrit; it is prose, except for the three formal verses in ll. 9-10. The spelling *-sthitttyā* (l. 6) may be noticed: cf. Pāṇini VIII. iv. 47, *Siddhānta-kaumudī* 48. On the spelling of the word *Pāṇḍurājyāyāḥ* in l. 3, where *jy* apparently stands for *j*, compare Dr. Konow's remarks above, Vol. XI, p. 105. The short *i* of *Shashthidatta* (l. 11) may be justified by Pāṇini, VI. iii. 63. The grammar of ll. 5-7 is very irregular; and the blame for this should probably rest with the official who drafted the document.

The purpose of the grant is to record an endowment by the Mahārāja Drōnasiṁha of Valabhī (l. 1), who made over for the cult of the goddess Pāṇḍurājā (?) in the Hastavaprāharaṇī (l. 3) the village of Trisaṅgamaka (l. 5). It bears the signature of Bhiruvaka, the *dēvī-karmāntika* or intendant of the estate of the goddess (l. 11), and was drafted in fair copy by Kumārila-patika (?), son of Shashṭhidatta (l. 11). Drōṇasiṁha was the second son of Bhaṭārka, the founder of the Maitraka dynasty of Valabhī; on this subject it suffices to refer to the remarks of Messrs. Jackson (*in loco*) and Smith (*Early History of India*, 2nd edn., p. 314).

The date is given on l. 11 as Saṁvat 183, the 15th day of the bright fortnight of Śrāvaṇa. If we take this as denoting the *current* year of the Valabhī era, the *tithi* mentioned must correspond to **Monday, 16 July, A.D. 501**, on which day it ended about 8 h. 26 m. after mean sunrise. But, as Mr. Sewell has pointed out to me, it may possibly denote an *expired* year, corresponding to A.D. 502: in that year there was an intercalated Śrāvaṇa, and hence, if the *tithi* mentioned refers to this intercalated Śrāvaṇa, it must have been current at sunrise on **Saturday, 6 July, A.D. 502**, while, if we refer it to the *nija* Śrāvaṇa of the same year, it must be connected with **Sunday, 4 August, A.D. 502**.

The only places mentioned are **Valabhī** (l. 1), the **Hastavapr-āharaṇī** (l. 3), and **Trisaṅgamaka** (l. 5). Valabhī is the modern Walā, in Kathiāwār. Hastavapra is now Hāthab, 6 miles south of Gōghā, in Bhaunagar State; on this I may refer to Dr. Konow's remarks above, Vol. XI, p. 106. Trisaṅgamaka has been identified by Mr. Jackson with Tarsamiā, near Hāthab.

TEXT.[2]

[Metres: vv 1-3, *Anushṭubh*.]

1 ॐ Svasti Valabhīitaḥ Parama-bhaṭṭāraka-pād-ānudhyātō mahārāja-Drōṇasiṁhaḥ=kuśalī sva-vishaya[kān*] sarvvān=ēv=āsmat-santak-ayuktaka-viniyuktaka-maha-

2 ttara-drāṅgika-dhruva-sthān-ādhikaraṇaṁ(ṇika)-chāṭa-bhaṭ-ādī[ṁ*]ś=cha samājñāpayaty=Astu vō viditaṁ yathā mahā[3]vijay-āyu[r*]-ddharmma-phala-yaśō-vishaya-vri(vṛi)ddha-

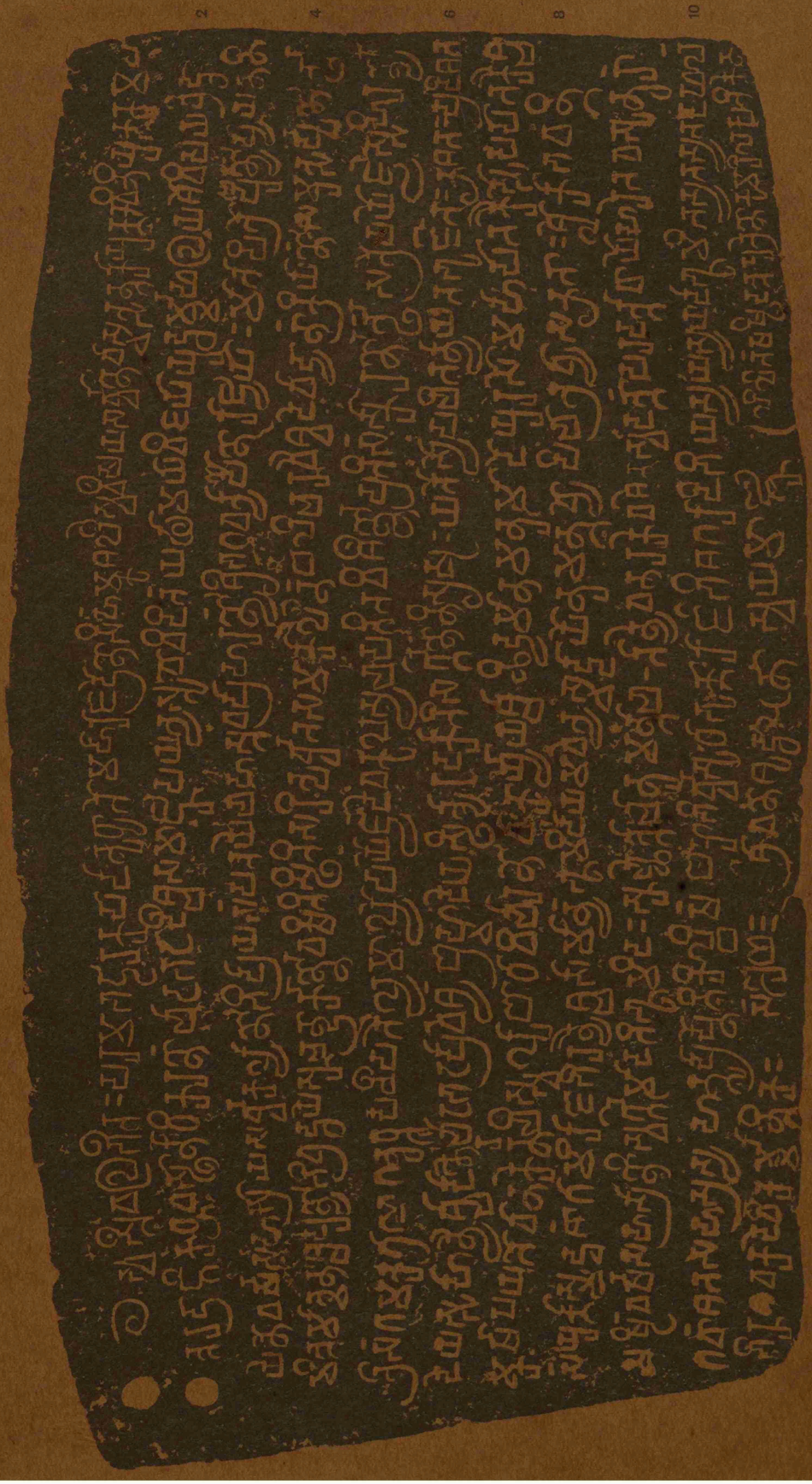
3 yē nō varsha-sahasrāya sarvva-kalyāṇ-ābhiprāya-saṁpattayē cha Hastavapr-āharaṇyāṁ śrī-bhagavatyāḥ=Pāṇḍurajyā(jā)yāḥ[3] mātā-pitrōḥ=puṇy-āpyāyana-ni-

[1] I may add that I am unable to agree with Dr. Konow's suggestion that the present plate is spurious (*ibid.*, p. 106, n. 1).

[2] From the ink-impression.

[3] See above.

Bhamodra Mohota Plate of Dronasimha : the year 183.



4 mittam=ātmanaś=cha puṇy-ābhivra(vṛi)ddhayē ā-chandr-ārk-ārṇṇava-kshiti-sthiti sarit-parvvata-samakālinaṁ bali-charu-vaiśvadēv-ādyānāṁ kriyāṇāṁ samutsarppaṇ-ārttha[ṁ]

5 Trisaṁgamāka-grāmō gandha-dhūpa-dīpa-tailya(la)-māly-ōpayōjyaṁ dēvākulyasya cha patita-viśirṇṇa-pratisaṁskaraṇ-ārttha[ṁ] satr-ōpayōjyē(jya)s=sa-hiraṇy-ā-

6 dēyas=sah=ānyaiś=ch=ādānair[1]=a-chāṭa-bhaṭa-prāvēśyaṁ brahma-dēya-sthittyā udak-ātisarggēṇa nisṛishṭaḥ yatō=sy=ōpachita-nyāyata[2] bhujeṁtaḥ[3] kṛiśa(sha)taḥ pradiśata-

7 ḥ=karshāpayatō vā na kēnachis(t)=sv-alp=ābādhā vichāraṇā vā kāryyā yaś=ch=ā[ch*]chhidyamānam=anumōdōyur=asan[4] mahā-pātakais=s-ōpapātakaiś=cha

8 saṁyuktō=smad-vaṁś-āgāmi-rājabhir=anyaiś=cha sāmānyaṁ bhūmi-dāyam=avēty=[ā*]smad-dāyō=numantavyō=pi ch=ātra Vyāsa-kṛitāḥ ślōkā bhavaṁti

9 Shashṭiṁ varsha-sahasrāṇi svarggē mōdati bhūmidaḥ [|*] āchchhēttā ch=ānumāntā cha[5] tāny=ēva narakē vaśē(sē)t [||* 1*] Sva-dattāṁ para-dattā[ṁ*] vā yō harēta vasundharāṁ [|*]

10 gavāṁ śata-sahasrasya hantu[ḥ*]=prāpnōti kilbishaṁ [||* 2*] Bahubhir=vvasudhā bhuktā rājibhiśagarādibhi[6] [|*] yasya yasya yadā bhūmi[s*]=tasya tasya tad[ā*] phalaṁ [|| 3*]

11 Bhiruvaka[7]-dēvi-karmmāntikaḥ saṁ 100 80 3 Śrāvaṇa śuddha 10 5 svayam=ājñā Likhitaṁ Shashṭhidatta-putrēṇa Kum[ā*]rila-patikēna[8]

No. 5.—THE ANDHAU INSCRIPTIONS OF THE TIME OF RUDRADAMAN.

By R. D. Banerji, M.A.

In January 1906 Mr. D. R. Bhandarkar, M.A., Carmichael Professor of Ancient Indian History and Culture in the University of Calcutta, then Assistant Superintendent, Archæological Survey, Western Circle, discovered six stone inscriptions "at Bhuj in the stores of the Engineering Department, near the palace."[9] These inscriptions were originally found "at Andhau in Khāvḍā, also called Pachchham. They were standing there as monuments on a hillock, but were removed to Bhuj by the late Dewān Ranchhodbhāī Udairām, who was very keen on antiquarian matters."[10] In 1906 Mr. Bhandarkar found that "these stone inscriptions are much weather-worn and would not yield any satisfactory estampages." In December 1914 Mr. Bhandarkar visited Bhuj with Mr. K. N. Dikshit, M.A., then Archæological Assistant to the Prince of Wales Museum of Western India, Bombay, and re-examined the inscriptions. In his annual report for the Western Circle for the year ending 31st March 1915 Mr. Bhandarkar states that "the stones were no doubt seen by me nine years ago, when I first visited Cutch. But then I had no time to decipher the inscriptions. The letters were so curiously weather-worn that they do not yield even passable estampages, but it is possible to prepare satisfactory transcripts from

---

1 The *ra* has been omitted, and added below the line.

2 Read *=ōchita-nyāyēna.*

3 Read *bhuṁjataḥ.*

4 Read *anumōdēr=āsan.*

5 After *cha* is a short stroke like a hyphen.

6 Read *rājabhis=Sagar-ādibhiḥ.*

7 Between *ru* and *va* is what seems to be a blocked-out *ga* ; and Mr. Jackson actually read the name as *Bhirugavaka* [connected with the name of Broach, *Bhṛigukachchha* ?—Ed.].

8 Mr. Jackson read *-kshatrikēna*, perhaps rightly ; but there is no diagonal cross bar in the *ksha*. The last letter may be *na* or *ṇa*.

9 *Annual Progress Report of the Archæological Survey, Western Circle, 1905-06*, p. 35.

10 *Ibid.*

originals. Last time I had not sufficient time to make these transcripts, and had to content myself with very brief account, indeed, of them."[1] In another part of the same report Mr. D. R. Bhandarkar published short summaries of the contents of these inscriptions. I visited Cutch in April 1919 and had the good fortune to transcribe all the records from the originals. Though they are in varying stages of imperfect preservation, I found that, with the exception of one, they yielded tolerably good impressions, which are reproduced with this article.

In all there are **six stone inscriptions** in the Fergusson Museum at **Bhuj**, of which five are records of the second dynasty of the Satraps of Saurāshṭra, i.e. of the family of Chāshṭana, and the remaining one a fragment of an inscription of the fifth and sixth century A.D. Four of the inscriptions belong to the reign of Rudradāman and were incised in the year 52 of the era used in the inscriptions and coins of the Satraps of Saurāshṭra, while the fifth belongs to the reign of the Mahā-Kshatrapa Rudrasiṁha I, and was incised in the year 114 of the same era. The fifth inscription of the time of Rudradāman, mentioned by Mr. Bhandarkar in the last lines of paragraph 15, Part II (*b*), of his Annual Report for the year 1914-15, appears to be still *in situ*.

The inscriptions of the time of Rudradāman of the year 52 which are here edited are those which were brought to Bhuj from Andhau by the late Ranchhodbhāi Udairām, formerly Dewān of Cutch. These inscriptions repose on a number of wooden platforms and have been placed under the grand staircase of the Fergusson Museum at Bhuj. Mr. Bhandarkar has recently referred to them in a note on his article on "Deccan of the Sātavāhana period."

Andhau, or Andhou, is a very small village close to Khevda, or Pachham, in the Cutch State. It is situated in Lat. 23° 46′ 10″, Long. 69° 53′ 55″. The site where the records were discovered is described by Mr. Bhandarkar as a hillock. Mr. K. N. Dikshit of the Archæological Survey is the only trained archæologist who seems to have visited the site; but no notes or description have been published by him as yet.

The records are incised on long narrow slabs of stone, and in the majority of cases the inscriptions are incised lengthwise. The material is hard stone, which has suffered very much from corrosion with a singular effect. In certain cases the bottoms of incisions made by the mason while chiselling the record remain intact on the stone, whereas the sides of the incision and the surrounding uninscribed portions of the stone have disappeared. The effect produced by this action is to make one believe at first sight that some letters of one record were cut in relief, while the rest were incised. The inscribed surfaces of the stones are uneven, and it is apparent that the mason did not take the trouble to make them smooth before incising the letters.

All four inscriptions refer themselves to the **reign** of the king (*Rājan*) Rudradāman, son of Jayadāman. His name is immediately preceded by that of his grandfather Chāshṭana, son of Ysāmotika; but no term indicating the relationship between Rudradāman and Chāshṭana is employed in any of the four records. All the records were incised on the same **date**, i.e. the year 52, the second day of the dark half of Phagṇa (*Phālgṇa*). In three out of the four inscriptions the year of the date is expressed both in words and in figures, while in the fourth it is given in figures only. The day of the month is in all four expressed both in words and in figures consisting of two symbols. The first symbol[2] has been read by Prof. Lüders as 15. So far the symbol for 15 has not been met with in published inscriptions or MSS. of this period; but Dr. Lüders may have found it in one of the Khotan MSS. The symbol consists of the *akshara va*, from the upper part of which a horizontal straight line is produced towards the right for a short distance. From the right extremity of this another straight line, vertical and longer than *va*, is produced downwards. This symbol looks very much like the proto-Nāgarī consonant *ga*.

[1] *Ibid*, 1914-15, p. 8.

[2] Prof. D. R. Bhandarkar of the University of Calcutta has accepted Dr. Lüders' reading of this symbol in a foot-note to his article on the "Śātavāhana period"; *I. A.*, Vol. XLVII, p. 154, n. 26.

It is difficult to understand why the symbol for 15 should be used in this inscription, because it mentions the lunar *tithi*. I am inclined to think that the syllable represents *Bahula* and not 15. Immediately after this we have two short horizontal strokes denoting 2. The year should be referred to the Śaka era of 78 A.D., and the dates are, therefore, equal to 130 A.D.

The language of the inscriptions is Prākrit, and the letters belong to the northern variety of the Indian alphabet of the first or second century A.D. The palæography calls for some remarks, as the alphabet shows archaisms when compared with that of the Junāgaḍh inscription of Rudradāman. With the exception of *u*, *ṛi* and *o*, no vowel occurs in its initial form. *U* in *uthāpita* occurs in all the records in the last line. *Ṛi* occurs twice, once in inscription B in the word *Ṛishabhadevasa* (l. 5) and once again in inscription D in the same word (l. 3). The initial form of *o* is to be found in A, B and D in the word *Opaśati*. The medial forms of vowels do not call for remarks with the exception of *u* in *ga* in *Phaguṇa* which is certainly earlier than the forms in the Junāgaḍh inscription of Rudradāman; cf. Bühler's *Indische Palæographie*, Table II. 9. VI. The rare medial *i* occurs in *Sīhamita* (C, l. 2), *Sīhila* (A, l. 3; B, l. 6; and C, l. 3) and in °*vīrāye* (A, l. 2). Among consonants *ka* does not show any curvature in its lowest extremity, except once in *Ysāmotika* (B, l. 1); *ja* shows two different forms, (1) with a curved back and (2) with a straight back. *Ña* occurs in conjunction with *ja* in *rājño*. *Ṭa* also is found only once, in *kuṭubiniye* (C, l. 3). It occurs conjointly with *ṣha* in *Chāshṭaṇa* (ABCD, l. 1), *lashṭi* (A, l. 3; B, l. 8; C, l. 3; D, l. 4), *Jeshṭavīrāye* (A, l. 2) and *Treshṭa* (C, ll. 3-4). The lingual *ṇa* shows the archaic form where no curvature is noticeable in either the top or bottom horizontal lines; cf *Phaguṇa* (A, l. 2; B, l. 4; C, l. 2), *śāmaṇeriye* (C, l. 2), *śrāmaṇereṇa* (D, l. 4). In the majority of cases the base line of *na* is curved, the exceptions being *na* in *Madanena* (C, l. 3) and the cases in inscription D. In the majority of cases *ba* is a perfect square with straight sides, the only exception being the form in *kuṭubiniye* (C, l. 3). *Ya* presents a number of varieties:—(1) the archaic type, in which the right and left vertical lines show no signs of curvature, but have acute angles on one side of their bases, cf. *Yśā* (A, l. 1); (2) the transition type, which shows slight signs of curvature, as in *Jayadāma* (A, l. 1); and (3) the early Kushan type, where the base line is curved, as in *Jayadāma* (C, l. 1). Both *la* and *ha* show angles on their line at the point of its junction with the horizontal parts. The right vertical limb of *la* is higher in comparison with the left limb of *ha*. Three different forms of the palatal *ś* are to be found in the records:—(1) the broad-backed type, which is usually to be found in the records of Ushabhadāta, in which the central pendant drops from the left half and slants to the right; cf. *Opaśati* (A, l. 3), *paṁchāśe* (B, ll. 3-4); (2) the more archaic form is to be found in inscription D, where it is used in all cases; in this form also the letter is broad-backed, but the pendant drops vertically from the middle of the curve; cf. *Opaśati* (l. 3), *śrāmaṇereṇa* (l. 4); (3) the northern form, in which the back consists of two different curves which meet in an acute angle; cf. *Śenika* and *śāmaṇeriye* (C, l. 2). This is exactly the form in the Mathura inscription of the year 72 of the reign of Śoḍāsa.[1]

The object of all four inscriptions is to record the erection of funeral monuments by the relatives of the deceased. In the inscriptions themselves these monuments are termed *lashṭis* (Pkt. *laṭṭhi*, lit. 'a stick'). Inscription A records the erection of such a monument (*lashṭi*) by Madana, son of Sīhila (Siṁhila), to the memory of his sister Jeshṭavīrā (Jyēshṭhavīrā), the daughter of Siṁhila of the Opaśati (Aupaśatika) *gōtra*, in the year 52, on the second day of the dark half of Phaguṇa (Phālguna), during the reign of the king (*Rājan*) Rudradāman, son of Jayadāman, (who was the grandson) of Chāshṭana, son of Ysāmotika. Inscription B records the erection of a funeral monument to the memory of Ṛishabhadēva, son of Siṁhila of the Opaśati (Aupaśatika) *gōtra*, by his brother Madana, son of Siṁhila, on the same year, month and day. Inscription

[1] *Ante*, Vol. II, p. 199, No. II.

C records the erection of a funeral monument by Madana, son of Simhila, to the memory of his wife Yaśidatā (Yaśodattā), a novice (*śrāmaṇērī*), the daughter of Sihamita (Simhamitra), of the Śenika (Śrēṇika) *gōtra*, on the same day. Thus inscriptions A, B, and C record the erection of monuments by one Madana, son of Simhila, to the memory of his brother Ṛishabhadēva, his sister Jeshṭavīrā and his wife Yaśōdattā. The fourth inscription records the erection of a funeral monument to the memory of Ṛishabhadēva, son of Treshṭadata (Trīshṭadatta), by his father Treshṭadata, a male novice (*śrīmanera*), of the Opaśati (Aupaśatika) *gōtra*, on the same date as that mentioned in inscriptions A, B, and C. Prof. D. R. Bhandarkar is certainly wrong in stating that this inscription "is a memorial stone of Ṛishabhadeva, of the Opaśati *gōtra* and son of Treshṭadata, erected by Madana his brother."[1] It is a memorial stone of one Ṛishabhadeva, son of Treshṭadata, of the Opaśati *gōtra*; but there is no mention of a brother named Madana. It is evident that the learned Professor failed to read the last line of inscription D. He appears to have read *Śrī-Madanena* instead of *śrāmaṇereṇa*, which is very clear on the stone itself and distinct in impression. It is not very easy to understand how Prof. Bhandarkar reconciles the words *pitṛ*[*ā*] *Treshṭadātena*, which occur at the beginning of the sentence, with the word immediately following them, if he read *Śrī-Madanena*. Prof. D. R. Bhandarkar's inability to decipher this word has led him to make some unnecessary conjectures regarding the personages mentioned in inscription D. He states, "this is rather puzzling, because the *gotra* Opaśati and the name Madana point to this Ṛishabhadeva being the same as that of the first inscription, Treshṭadata being in that case presumed to be the other name of their father Sihila; but it is inconceivable that two stelæ were put up or can be put up in memory of one and the same individual."[2] His remarks induced me to examine inscriptions B and D very carefully; but I am now sure that his difficulties were caused by his own inability to read the last line of the record. The fourth inscription does not mention Madana as the brother of Ṛishabhadēva: therefore this Ṛishabhadēva cannot be the same person as that mentioned in inscription B. In fact, inscription D records the erection of a funeral monument to another Ṛishabhadēva, son of Treshṭadata, who was a different person from Sihila, the father of Ṛishabhadēva mentioned in inscription B. The stele was raised by Treshṭadata, the father of the deceased, who was a Buddhist monk (*śrāmaṇēra*).

The mention of Chāshṭana, son of Ysāmotika, immediately before the name of his grandson Rudradāman, son of Jayadāman, in these four records, without any connecting link, has led scholars to make a number of conjectures. Prof. D. R. Bhandarkar states that originally he thought that the word *pauttrasya* had been omitted in each and every inscription, but now he is inclined to agree with his assistant Dr. Romesh Chandra Majumdar in thinking that the omission of the word *pauttrasya* or *poṭasa* indicates that in the year 52 Chāshṭana and Rudradāman were reigning jointly. Prof. D. R. Bhandarkar states[3] in a popular account of the history of Deccan named "Dekkan of the Śātavāhana period" that "Mr. R. C. Majumdar of the Calcutta University has kindly offered the suggestion that the date had better be ascribed to the conjoint reign of Chāshṭana and Rudradāman."[4] Apart from the possibility of such an event in India, nobody having ever thought or tried to prove conjoint reigns of two monarchs except Messrs. Bhandarkar, there is sufficient evidence in the Andhau inscriptions themselves to prove that the author of the record was quite ignorant as to the exact relationship between Chāshṭana and Rudradāman. It is very well known that, though Rudradāman was an independent monarch, he never used the title *Rājan* alone. This is true of all princes of this dynasty and of that of *Svāmin* Jīvadāman. There is not a single coin or inscription of this dynasty in which the title *Rājan* is used by itself and not

[1] *Annual Progress Report of the Archæological Survey of India, Western Circle, 1914-15*, p. 67.
[2] *Ibid.*
[3] *Indian Antiquary*, Vol. XLVII, 1918, p. 154, note 26.
[4] *Ibid.*

in combination with the titles *Mahā-Kshatrapa* or *Kshatrapa*. In fact the Andhau inscriptions are the only records known which mention Chāshṭana or Rudradāman as *Rājās* and not as *Mahā-Kshatrapas*. The only possible explanation of this is that in a remote place like Andhau on the Rann of Cutch the people were not aware of the new titles of the new dynasty of rulers,—titles on which Rudradāman set great store, as is proved by the phrase *svayam-adhigata-mahā-kshatrapa-nāmnā*.[1] The cause of the absence of any word or phrase indicating the relationship between Chāshṭana and Rudradāman now becomes clearer. It was due to the ignorance of the people of Andhau and does not indicate the joint reign of the grandfather and the grandson. It has been argued by some of my friends that the absence of any word or phrase indicating their relationship may have been due to the carelessness of the scribe in one record; but the absence of such a word or phrase in four different records is significant. After deciphering the Andhau records I find that all of them were inscribed on the same day, three of them at the instance of one person, Madana, son of Sīhila, who dedicated stelæ to his elder brother, his sister and his wife, while the fourth was raised by another person of the same clan to the memory of his son. Besides this, there is a family resemblance between the letters of all four records, which proves that they must have been written by one and the same person. No wonder, the same mistake was committed in all four records. When the ruler of the dynasty of Chāshṭana had become more secure in Cutch, people were better informed than Madana, son of Sīhila, and his clansman Treshṭadata, the *śrāmaṇēra*, as in another inscription found at the same place we find the titles correctly given. This inscription records the erection of a *lashṭi* in the year 114, during the reign of the king, the *Mahā-Kshatrapa, Svāmin* Rudrasiṁha, son of the king, the *Mahā-Kshatrapa, Svāmin* Rudradāman, grandson of the *Kshatrapa, Svāmin* Jayadāman and great-grandson of the king, the *Mahā-Kshatrapa, Svāmin* Chāshṭana.

I edit the inscriptions from the original stones and from impressions taken by myself:—

A.

The record consists of three lines of writing on a single slab of stone. The inscribed surface measures 4′ 9″ × 1′ 1″, and the average height of the letters is 1″. The object of the inscription is to record the erection of a funeral monument (*lashṭi*) by Madana, son of Sīhila, to the memory of his sister Jeshṭavīrā (Jyēshṭhavīrā), the daughter of Sihila of the Opaśati (Aupaśatika) *gōtra*.

TEXT.

1 Rāj[ño] **Chāsh[ṭ]anasa**[2] **Ysāmotika-putrasa** rājño **Rudradāmasa Jayadāma-**
putrasa

2 **Va[r]sh[e] d[vi]-pa[ṁ]ch[āśe 50],**[3] **2, Phaguṇa-bahulasa d[v]itiya va 2**
Madanena Sīhila-putrena [bha][3]**giniye Jeshṭavīrāye**

3 **[Sī]hi[la-dhi]ta**[4] **Opaśati-sā-gotrāye lashṭi uthāpita**

[1] *Ante*, Vol. VIII, p. 44, l. 15.

[2] The first six syllables of the first two lines have suffered considerably from corrosion. It is not easy to explain why this part only has been damaged, while the rest has escaped. The remaining portion of the record is quite legible. As has been stated above, the bottoms of the incisions of six letters in the first and second lines are extant, the sides and the surrounding uninscribed surface having disappeared, leaving a smooth polished surface. The lower parts of *rā, chā, shṭa* in l. 1 and the upper parts of *rshe, dvi*, and *śe* in l. 2 have also disappeared. This portion of the stone appears to have been used for sharpening tools while the rest was buried underground.

[3] This syllable has suffered on account of flaking.

[4] In l. 3, *sī* and *la* of *Sīhila* and *dhi* of *dhita* have partly disappeared from the same cause.

TRANSLATION.

In the year fifty-two, 50, 2; on the second day of the dark half of Phaguna (Phālguna), *va* . 2, of (the reign of) the king **Rudradāman**, son of **Jayadāman**, (the grandson) of the king **Chāshṭana**, son of **Ysāmotika**, (this) staff (*lashṭi*) was raised by **Madana**, son of **Sīhila** (Siṁhila), (in memory) of his sister **Jeshṭavīrā** (Jyēshṭhavīrā), daughter of **Sīhila** (Siṁhila), of the **Opaśati** (Aupaśatika) *gōtra*.

B.

The record consists of eight lines. The inscribed surface measures 1′ 8″ × 1′ 10″, and the average length of the letters is 1¼″. The inscription records the erection of a funeral monument to the memory of Ṛishabhadēva, son of Sihila, of the Opaśati (Aupaśatika) *gōtra*, by his brother, Madana, son of Sihila.

TEXT.

1 Rājño **Ch[ā]shṭanasa Ysāmotika-**
2 **-pu[tra]**[1]**sa** rājño **R[u]dradāmasa**
3 **Jayadāma**[2]**-putrasa varshe dvi-pa[ṁ]-**
4 **[chā]**[2]**śe, 50, 2, Phaguṇa-bahulasa**
5 **dvitiyaṁ va 2 Ṛishabhadevasa**
6 **Sīhila-putrasa Opaśati-sa-gotrasa**
7 **bhrātr[ā] Madanena**[3] **[Sīhi]la-putrena**
8 **lashṭi uthāpita**[3]

TRANSLATION.

In the year fifty-two, 50, 2; on the second day of the dark half of Phaguṇa (Phālguna), *va* . 2, of (the reign of) the king **Rudradāman**, son of **Jayadāman**, (who was the grandson) of the king **Chāshṭana**, son of **Ysāmotika**, (this) staff (*lashṭi*) was raised in memory of **Ṛishabhadēva**, son of **Sihila** (Siṁhila), of the **Opaśati** (Aupaśatika) *gōtra*, by (his) brother, **Madana**, son of **Sīhila** (Siṁhila).

C.

The inscription consists of three lines. The inscribed surface measures 4′ 7″ × 7½″, and the average length of the letters is 1″. Its object is to record the erection of a funeral monument to the memory of Yaśadatā, a novice, the daughter of Sihamita, of the Śenika *gōtra*, by her husband Madana, son of Sihila.

TEXT.

1 Rājño **Chāsṭanasa Ys[ā]motika-putrasa** rājño[4] **Rudradāmasa Jayadāma-putrasa varshe dvi-paṁchāśe 50, 2**
2 **Phaguṇa-bahulasa dvitiyaṁ vā**[5] **2**[6] **Yaśadatāye Sīhamita-dhitā Śenika**[7]**-sa-gotrāṇa**[8] **śāmaṇeriye**
3 **Madanena Sihila-putrena kuṭubiniye** [lashṭi[9]] **uthāpitā**

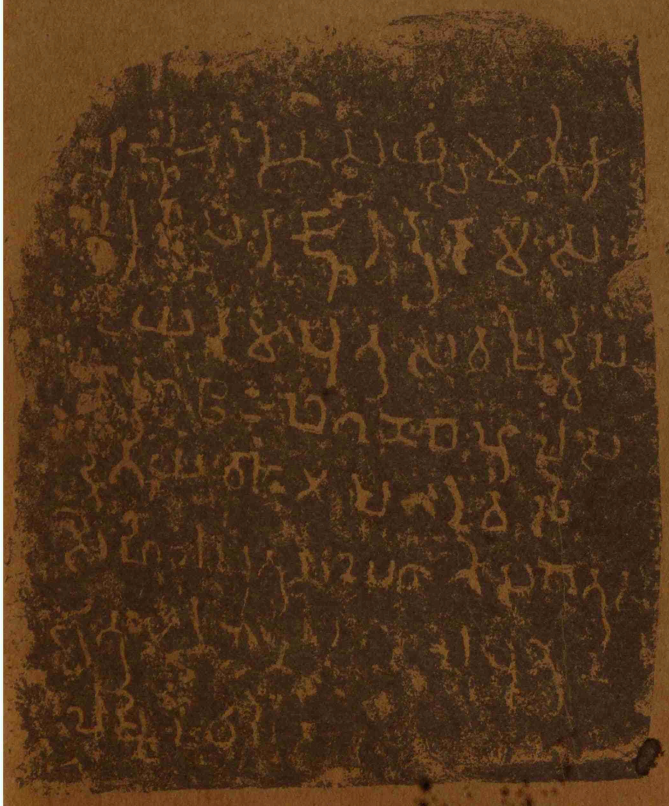
[1] This letter has suffered through flaking.
[2] The first syllable of lk. 3-4 has suffered badly through flaking.
[3] The middle of ll. 7-8 has almost disappeared. This damage appears to be due to the use of this part of the stone for sharpening tools.
[4] The *ña* in this ligature has become very faint.
[5] Only the left half of the symbol is legible.
[6] There is only one stroke after the symbol for *bahula*.
[7] This may also be read *Śinika*.
[8] Read *sa-gotrāye*.
[9] This word has disappeared almost entirely through flaking.

Andhau Stone Inscriptions of the time of Rudradaman: the year 52.

Ghosundi Stone
Inscription.

Andhau Stone Inscription of the time
of Rudradaman: the year 52.

B



TRANSLATION.

In the **year fifty-two, 52,** on the **second day of the dark half of Phaguṇa** (Phālguna), *va.* 2, (during the reign) of the king **Rudradāman,** son of **Jayadāman,** (the grandson) of the king **Chāshṭana,** son of **Ysāmotika,** (this) staff (*lashṭi*) was raised by **Madana,** son of **Sīhila** (Siṁhila), (in memory) of his wife **Yaśadatā** (Yaśodattā), a novice nun (*śrāmaṇērī*), daughter of **Sīhamita** (Siṁhamitra), of the **Śenika** (Śrēṇika) *gōtra.*

D.

This inscription consists of four lines in a very imperfect state of preservation. The second halves of the first two lines have disappeared almost entirely, stray syllables being legible in places. A portion of the stone at the bottom of the inscription has also broken away, carrying away the lower part of the subscript *ra* of *śrā* and the lower half of *ra* in *re* of *śrāmaṇerena*. The object of the inscription is to record the erection of a funeral monument to the memory of one Ṛishabhadēva by his father Treshṭadata, a Buddhist monk, in the year 52. It measures 3′ 5″ × 1′ 2″.

TEXT.

1 Rājño **Chāshtanasa**[1] **Ysā**[2]**motika-pu**[tra**sa**] r[ā]j[ño] **Ru**[**dradāmasa**] **Jayadāma-**
2 putra[**sa**] **varshe 50, 2, Phagu**[**na**]**-bahulasa dvitiyam va 2**
3 **Ṛishabhadevasa Treshṭadata-putrasa Opaśati-gotrasa**
4 pitr[ā] **Treshṭadatena** śrā[3]maṇ[e]rena[4] lashṭi uthā[5]pita

TRANSLATION.

In the **year 52,** on the **second day of the dark half of Phaguna** (Phālguna), *va* . 2, (during the reign) of king **Rudradāman,** son of **Jayadāman,** (the grandson) of king **Chāshṭana,** son of **Ysāmotika,** (this) staff (*lashṭi*) was raised (in memory) of **Ṛishabhadēva,** son of **Treshṭadata** (Trishṭadatta), by his father **Treshṭadata,** a novice (*śrāmaṇēra*), of the **Opaśati** (Aupaśatika) *gōtra.*

No. 6.—THE GHOSUNDI STONE INSCRIPTION.

By K. P. Jayaswal, M.A. (Oxon.), Bankipore.

This inscription is known as the Ghosūṇḍī stone inscription. Ghosūṇḍī is a village near Nagarī in the Chitorgaḍh District of Rājputānā. The classical name of Nagarī is Madhyamikā. It was the seat of the republican community of the Śibis, known from their coins found in the locality.

An excellent estampage of the inscription on which the present edition is based was prepared under the direction of Mr. D. R. Bhandarkar, then Superintendent of the Archæological Survey of India, Western Circle.

---

[1] The *ā* mark in *Chāshṭana* is not horizontal as in inscriptions A and C.

[2] A similar *a* mark is used in *Ysā.*

[3] The *ā* mark is horizontal in *śrā.*

[4] The presence of a base line in the 10th syllable in l. 4 proves conclusively that syllables 8-12 of this line represent *śrāmaneraṇa* and not *Śrī-Madanena,* as read by Prof. D. R. Bhandarkar.

[5] A similar *a* mark is to be found in *thā.*

This inscription was first brought to the notice of scholars by Kavirājā Shyāmaḷa Dāsa in the *Journal of the Bengal Asiatic Society*, Vol. LVI, Part I, pp. 77 ff., No. 1 and Pl. V. It is on a stone slab then fixed in a *Bāulī*, or well with steps, but now deposited in the Victoria Hall, Udaipur. The original place of the inscription, as indicated by the material and the shape of this slab, was the Hāthī-vāḍā at Nagarī. Hāthī-vāḍā acquired its name from the fact that Akbar's army used it as an elephant-stable. The wall is massive, built of dressed stone-pieces without cement. Mr. Bhandarkar is of opinion that the beautiful column described by Kavirājā Shyāmala Dāsa, which also belongs to the same architectural type as the Hāthī-vāḍā, was removed bodily from its original site somewhere in the neighbourhood of the Hathī-vāḍā.

Unfortunately the inscription is fragmentary; a single slab of the inscribed portion gives the three lines reproduced here. The lines continued both right and left, as is evident from the context. The inscribed surface measures 3′ 3″ × 8½″, and the average height of each letter is 1¼″. The letters are in a good state of preservation. The lines are regular, and the letters well executed. The inscription is in the Northern Brāhmī of the later Maurya, or Early Śunga, period.

It is of great importance from the point of view of religious history. It is the earliest monumental proof of the fact that temples were erected to Vāsudēva and to his brother, and that the followers of the cult included even Brahmins. Further, this is the earliest inscription in Sanskrit yet discovered in the country. It refers to the building of *pūjā-śilā-prākāra* in the *Nārāyaṇa-vāṭa*, or Nārāyaṇa compound (Hindi, *Bāḍā*). The *pūjā-śilā-prākāra* was probably a railing round the temple or the statues. As its name signifies, it may have been a railing of slabs, like those discovered at Sāñchī. It was dedicated to the gods Saṁkarshaṇa and Vasudēva. Saṁkarshaṇa and Vāsudēva as gods appear also in the Nānāghāṭ[1] Inscription, which in view of the Hāthigumphā Inscription of Kharavela (165 B.C.)[2] is to be assigned to circa 200 B.C. There the two gods are described as belonging to the Lunar Family.[1] They were thus the deified heroes whom the Jātakas, Pāṇini and the Purāṇas treat as historical personages and as belonging to the Vṛishṇi family of the Lunar Kshattriyas.

The worship of Kṛishṇa is not found in the Jātakas, nor is it found in Pāṇini. The view that Pāṇini notes the deified Vāsudēva cannot be maintained. My reasons for this opinion are given in my *Hindu Polity*; so I need not repeat them here. But the worship of Kṛishṇa with almost all his signification, *e.g.* of the child Kṛishṇa (*Dāmōdara*) and Trivikrama, was known as early as Baudhāyana's *Dharma-sūtra*, the date of which has been assigned by Bühler as circa 400 B.C. I demur to this dating, and my reasons are given in my Tagore Lectures. Baudhāyana's *Dharma-sūtra* cannot be earlier than about 200 B.C. Kṛishṇa as a god is in the *Arthaśāstra* not prominent (see Bk. 13, ch. 3). The two inscriptions (Nānāghāṭ and Ghosuṇḍī) and Baudhāyana's *Dharma-sūtra*, therefore, are the earliest records establishing the deification of Krishṇa. It should be noted that in the inscription the first place is given to the elder brother Saṁkarshaṇa, and Vāsudēva is not yet more prominent than his brother, who later on is completely outraced and superseded by his junior. The process had probably already begun, as the "*Nārāyaṇa-vāṭa*" indicates the prominence of one only of the two, and the later history would suggest that it was Vāsudēva who had begun to be identified with Nārāyaṇa. On these data we can say that Kṛishṇa's worship began before 200 B.C., and that at that time probably it was not very ancient. In arriving at this conclusion our inscription is of the greatest value. While the Nānāghāṭ record still remembers the family of the two brothers, the Ghosuṇḍī inscription detaches them completely from their human associations and treats them as *dēvas* pure and simple. The *Garuḍa-dhvaja* dedication of Heliodorus[3] similarly treats Vāsudēva as a god, and it is noteworthy that it does not mention the elder brother Saṁkarshaṇa at all. In the

[1] *Arch. Surv. W. Ind.*, Vol. V, pp. 60 ff.; Lüders, *List of Brāhmī Inscriptions, ante*, X, *App.*, *No. 1112*.
[2] *J. B. O. R. S.*, Vol. III, pp. 425-485.
[3] *J. R. A. S.*, 1909, pp. 1053 ff.

Nānāghāṭ inscription the two brothers are invoked together, Saṁkarshaṇa being first. The Ghosūṇḍī record shows that the two brothers were still equally worshipped, and the dedication of the railing was to both. This history of the worship of Vāsudēva would place the Nānāghāṭ evidence as the first piece chronologically, the Ghosūṇḍī as the next and the Besnagar as the last.

As to the date of our present inscription, the only thing that can be said with certainty is that the script is later than Aśoka's time. The *ka*, *śa* and *sha* in our inscription are clear instances of this. In comparison with the inscriptions of Nānāghāṭ, Hāthigumphā and Besnagar (Heliodorus) it is difficult to decide the chronological position of this record. Taking into consideration the locality, it has on the whole a close affinity to the letter-types of the column inscription of Besnagar. The age of the inscription can be assigned between circa 200 B.C. and 150 B.C. As the forms of the letters are definitely older than in the Pabhosā inscription,[1] the lower limit cannot be placed below 150 B.C. In the inscription of Khāravela the transitional forms are very common; but they are absent from this Ghosūṇḍī inscription. The two documents are, however, widely separated locally; and the standard of comparison cannot be the same. The record of Heliodorus, who was an ambassador to Antialkidas, shows that in Central India a transition set in later. The date 250 B.C., assigned by Dr. Bühler to the Ghosūṇḍī inscription, is much too high. The post-Aśokan types in the inscription are of a definitely fixed character, denoting a fairly long interval.

The inscription is also important from the point of view of the language employed. Former writers, including Dr. Lüders, have described it as a mixture of Prākrit and Sanskrit.[2] I am afraid I cannot subscribe to that view. It was based on defective readings (*putēna* instead of *putrēṇa*, etc.). In my opinion it is a pure Sanskrit record. The only room for controversy is as regards the word inscribed as *bhagavabhyāṁ*. But this seems to be a case of mistake on the part of the engraver. In inscribing a conjunct of three letters he omitted the smallest member. The rest of the inscription is perfect Sanskrit.

TEXT.

1 * *[3] na **Gājāyanēna Pārāśarī-putrēṇa** sa * * * *[4]
2 * * jinā bhagavabhyāṁ[5] Saṁkarshaṇa-Vāsudēvābhyāṁ * * * *
3 * * bhyāṁ pūjā-śilā-prākāro **Nārāyaṇa-vāṭē** kā[6] * * * *

TRANSLATION.

By * * * * (*ta*), of the family of Gaja, son of a **Pārāśarī** (a lady of the Parāśara family)[7] (this) railing of stone for the purposes of worship[8] is (caused to be made) in the **Nārāyaṇa-compound**, (dedicated) to the Blessed Ones (*bhagavabhyāṁ*) Saṁkarshaṇa and Vāsudēva, the gods, * * * * * *

No. 7.—ALUR INSCRIPTION OF THE REIGN OF VIKRAMADITYA V: SAKA 933.

By Lionel D. Barnett.

Ālūr, from which the following record comes, is a village in the Gadag *tāluka* of Dhārwār District, Bombay Presidency. In our record it is styled **Māḷad-Ālūr**, "Ālūr of the Plain,"

[1] *Ante*, Vol. II, pp. 240 ff.

[2] *J. A. S. B.*, Vol. LVI, Pt. I, *List of Brāhmī Inscriptions*, Nos. 6-7.

[3] The letter is broken. It was probably a *ta*. The following *na* indicates an instrumental.

[4] We do not know how many letters are missing at the end of each line.

[5] Read *bhagavadbhyāṁ*.

[6] Read *kā(ritaḥ)*.

[7] Evidently a Brahmin lady. The form 'Gājāyana' according to the rules of Pāṇini would also indicate a Brahmin family.

[8] Probably for *pradakshiṇā*, as in other known religious places of the time.

which serves to distinguish it from the many other towns and villages of the same name. It is situate in lat. 15° 19½′ and long. 75° 51′, three miles NE from Ḍambaḷ. Our inscription, of which a transcript is given in Vol. I, fol. 20a of the Elliot Collection (R. As. Soc. copy), was found on a slab at the temple of Īśvara; I edit it from an ink-impression prepared for the late Dr. Fleet, which is now in the British Museum. The stone is rectangular, and in its upper compartment has some sculptures, viz in the centre a *liṅga* on a stand, to the proper right a squatting figure facing full front, and to the left a cow with suckling calf facing the *liṅga*. Underneath this is the inscribed area, about 4 ft. 4 in. in height and 1 ft. 8½ in. in width.—The character is Kanarese, a good bold well-rounded type, rather archaic in style. The *ṭh* on l. 34, as sometimes in other records, is indistinguishable from *r*. The height of the letters in ll. 1-4 is about ½ in., and elsewhere from ½ in. to ¾ in.—The language, except in the three formal Sanskrit verses at the end (ll. 42-46), is Old Kanarese. The *ḷ* is preserved. *Noḷaṁbādhirājana* (l. 3; but *Noḷaṁbādhirājaṁ* and *Noḷaṁbavāḍi*, l. 11), *Keṁgaḷi* (l. 12), *aḷ p= illad=ātaṁ* (l. 20), *iḷḍ=* (l. 30), *aḷidaṁg=* and *aḷida* (l. 41). The words *marmmaḷ* (l. 1), *ghaṭiga* (l. 19), and *kaṁbi-vadda* (ll. 28, 29) are of lexical interest.

The record opens with a verse (ll. 1-4) in praise of Iṛiva-Noḷambādhirāja, announcing that he was married to a lady who was a granddaughter of Taila (Āhavamalla Nūrmaḍi-Taila II), a daughter of Satyāśraya (Akaḷaṅkacharita Iṛivabeḍaṅga-Satyāśraya), and *taṁge* (literally, "younger sister," but really "paternal cousin") to Vikramāditya [V Tribhuvanamalla]. On these and other facts connected with the inscription see *Dyn. Kanar. Distr.*, pp. 332, 434, and 558.[1] It then refers itself to the reign of Tribhuvanamalla (Vikramāditya V), and introduces as his feudatory the above-mentioned Iṛiva-Noḷambādhirāja, a scion of the Pallava family, bearing among other titles that of "lord of Kāṁchī best of cities," who at the time was ruling over the Noḷaṁbavāḍi Thirty-two Thousand, the Keṁgaḷi Five-hundred, the Ballakunde Three-hundred, the Kukkanūr Thirty, and five towns in the Māsiyavāḍi *nāḍu* (ll. 5-14). The next section (ll. 14-21) introduces with all his titles a high officer of the latter, the Brāhmaṇ general Veṇṇeya-Bhaṭṭa, son of Diṇḍa-Paṇḍita; and then, after the date (ll. 24-26), we learn that this person, having received certain lands from the representatives of Âlūr, presented them as an endowment to Amarāchārya, of the Guhēya Maṭha in Sirivura, for the benefit of his monastery (ll. 26-38). The writer of the edict was Maruḷōja (l. 46).

The date[2] is given on ll. 24-26 as: Śaka 933 lapsed, the cyclic year Sādhāraṇa; the full-moon day of Vaiśākha; a Sunday. This is slightly irregular. Sadhāraṇa was Śaka 933 *current*; and the given *tithi* corresponded to Monday, 1 May, A.D. 1010, when it ended 2 h. 3 m. after mean sunrise (for Ujjain).

The places mentioned are Kāñchī, i.e. Conjeevaram (l. 10), the Noḷaṁbavāḍi Thirty-two Thousand, in the region of Bellary (l. 11), the Keṁgaḷi Five-hundred (l. 12), the Ballakunde Three-hundred (l. 12), the Kukkanūr Thirty (l. 12), the Māsiyavāḍi *nāḍu* (l. 13), the Male or Highlands of the Western Ghauts (l. 20), the Sapta-grāma, or "seven towns" (l. 21), Māḷad=Ālūr (ll. 26, 30; *vide supra*), Sirivura (ll. 27, 34), and Iṭṭage (l. 27). On Ballakunde see above, Vol. XIV, p. 267; on Iṭṭage, above, Vol. XIII, p. 36; on Kukkanūr, *ibid.*, p. 40; on Māsiyavāḍi, *Dyn. Kanar. Distr.*, p. 465, and above, Vol. XV, p. 78. Sirivura is now Sirūr, in lat. 15° 21′ and long. 75° 49¼′, about 3 miles NNE. from Âlūr.

TEXT.[3]

[Metres: v. 1, *Mattēbhavikrīḍita*; vv. 2-4, *Anushṭubh*.]

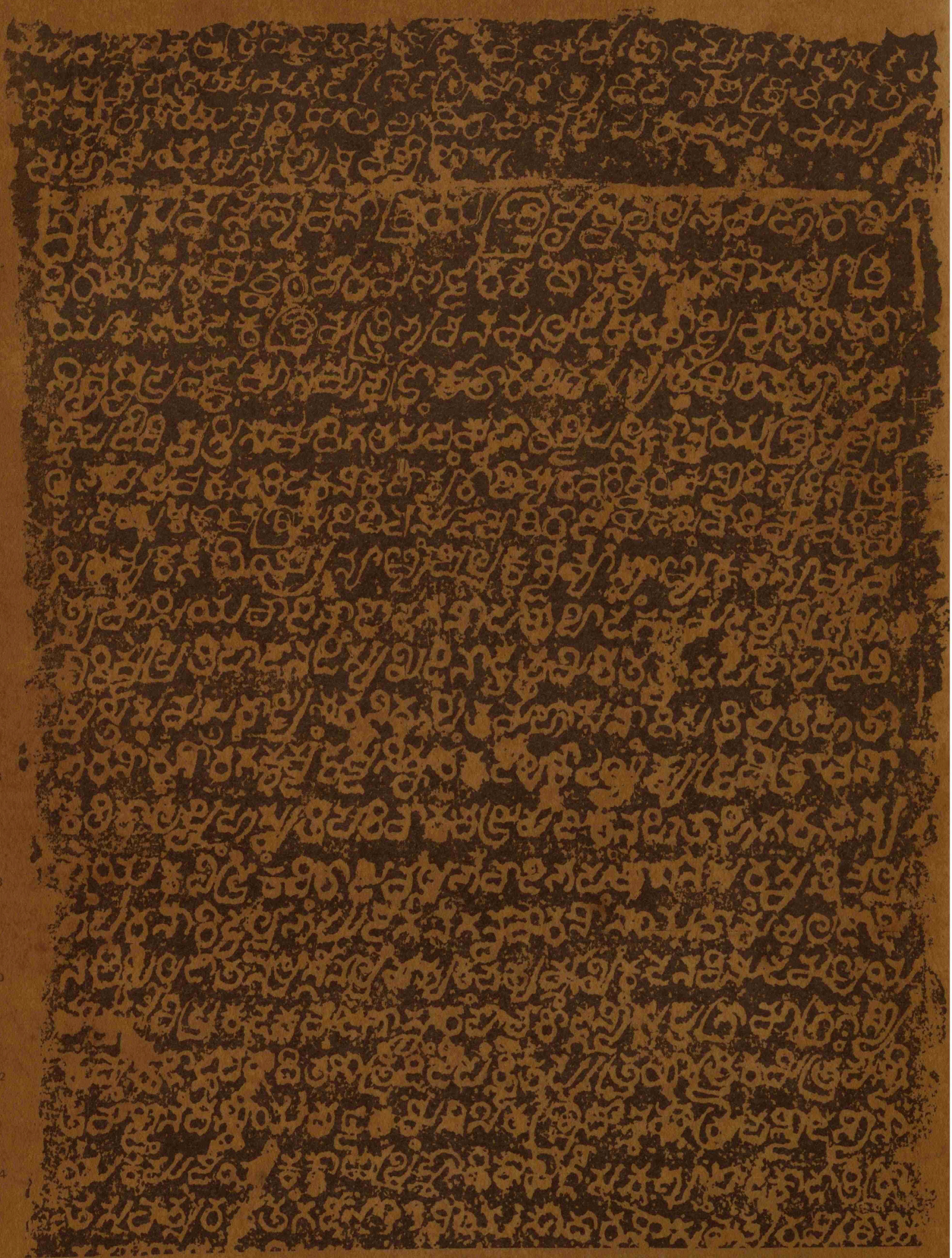
1 Mann-mārgg-āgraṇi chakravartti-tiḷakaṁ Tailaṁge marmmaḷ poḍarppina Satyāśra-

[1] Much information as to the earlier Noḷaṁbas will be found above, Vol. X, pp. 54 ff.

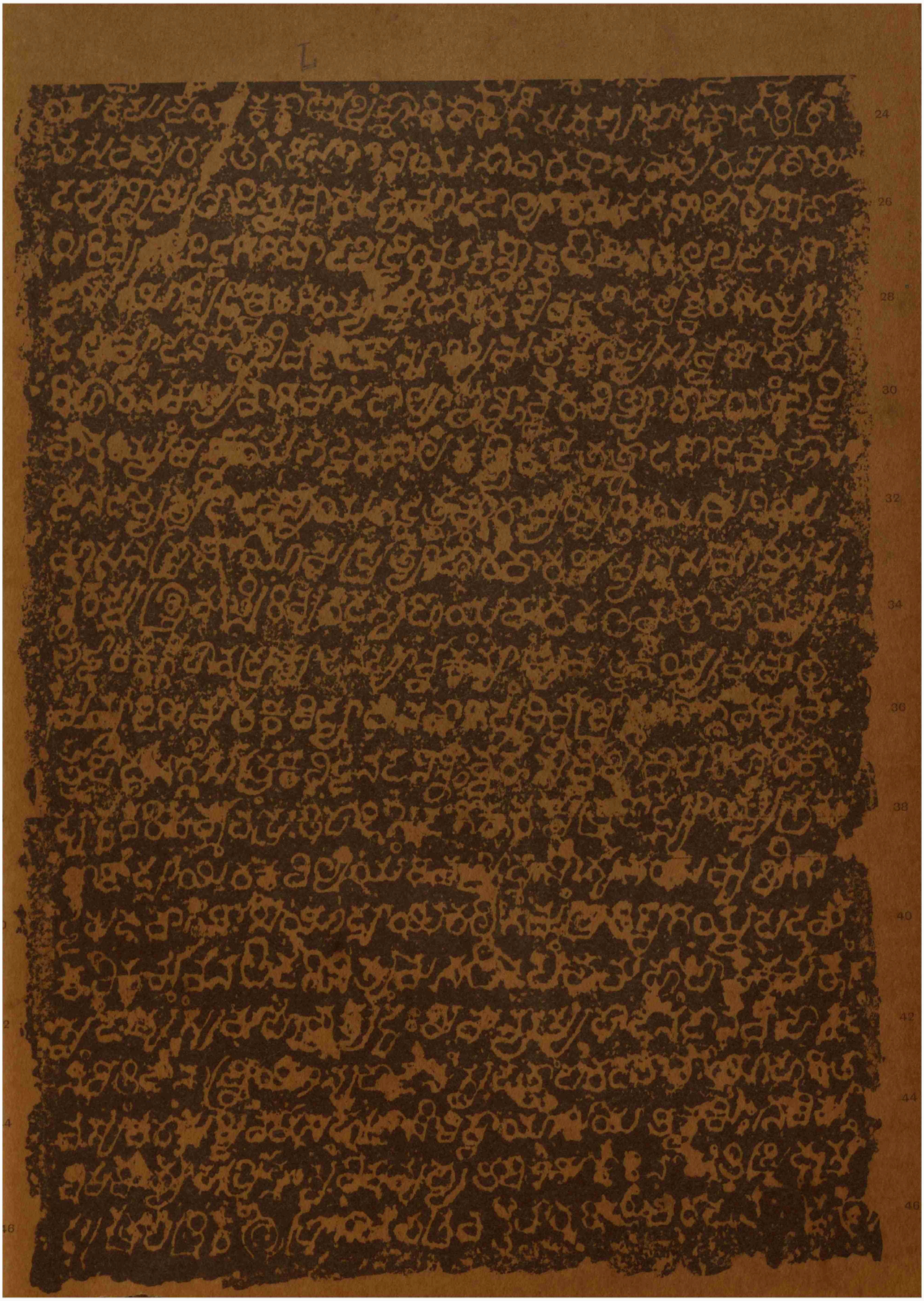
[2] I have to thank Mr. R. Sewell for his kindness in verifying my calculations.

[3] From the ink-impression.

Alur Inscription of the reign of Vikramaditya V : Saka 933.



F. W. THOMAS SCALE ONE-THIRD WHITTINGHAM & GRIGGS, COLL.



2 ya-chakravarttiya magaḷ śrī-**Vikramāditya-dēvana** chakrēśana taṁ-
3 ge tann=arasiy=end-and=ī **Noḷaṁbādhirājana** peṁpaṁ kuḷamaṁ mahā-
4 mahimeyaṁ baṇṇippon=ē vaṇṇipoṁ ‖ [1*]
5 Svasti samasta-bhuvan-āśraya Śrī-Pṛithvī-vallabha mahārājā-
6 dhirājaṁ paramēśvara paramabhaṭṭārakaṁ **Chhā(chā)ḷuky-ābharaṇaṁ Satyāśra-**
7 **ya-kuḷa-tiḷakaṁ** śrīmat-**Tribhuvanamalla-dēvara** rājyam=uttarōttar-ā-
8 bhivṛiddhi-pravarddhamānam=ā-chaṁdr-ārkka-tāraṁ baraṁ saluttam-ire [1*]
tat-pāda-pa-
9 dm-ōpajīvi svasti samadhigata-paṁcha-mahā-śabda **Pallav-ānvaya** Śrī-Pṛithvī-va-
10 llabhaṁ **Pallava-kuḷa-tiḷakan=ēka-vākyaṁ Kāṁchī-puravar-ēśvaraṁ** maṇḍaḷika-
Triṇētraṁ
11 ghaṭey=aṁkakāraṁ śrīmad-**Iṛiva-Noḷaṁbādhirājaṁ Noḷaṁbavāḍi-mūvattirchchhā-**
12 **siramuṁ Keṁgaḷiy-ainūruṁ Ballakunde-mūnūruṁ Kuk[k*]anūr-mmūva-**
13 **ttuṁ Māsiyavāḍi-nāḍ**=oḷagaṇa paṁcha-bāḍaṁgaḷumaṁ dushṭa-nigraha-
14 viśishṭa-pratipāḷanadiṁ sukhadin=āḷuttam-ire [1*] tat-pāda-padm-ōpajīvi
15 svasti samasta-rājya-bhara-nirūpita-mahāsēnādhipati pati-hit-ā-
16 charaṇaṁ raṇa-raṁga-dushṭaṁ dushṭa-nishṭhuraṁ kuṭila-Kauṭ[i*]lyaṁ
kshudra-vidrāvaṇaṁ
17 Kali-kāla-Bṛihaspati parivūra-vajra-paṁjaran=ahit-āhi-Garuḍan=u-
18 bhaya-kavīṁdraṁ kavi-rāja-vallabhaṁ vād-ībha-paṁchānanaṁ Sarasvatī-valla-
19 bhaṁ para-nārī-durllabhaṁ ghaṭigana gandha-vāraṇaṁ naya-dhāmaṁ chalad=ōja-
20 n=aḷip=illad=ātaṁ nallargge nallaṁ chaturā-Chaturmmukhaṁ kadana-vinōdaṁ
Maḷeya
21 marddanaṁ vipra-kuḷa-kamaḷa-bhāskaraṁ pārvvaroḷ=gaṇḍaṁ **Sapta-grāma-**
agraganyaṁ
22 **Kaṁma-kuḷ-ōdbhavaṁ** *dhīta[1]-gōtraṁ Diṁṇḍa-paṁṇḍita-putraṁ chhāṭuaka-mitraṁ
paṇḍi-
23 ta-maṇḍanaṁ **Veṇṇeya-bhaṭṭā*[ra]m=enisida** śrīman-mahā-prachaṇḍa-ḍaṇḍanā-
24 yakaṁ ghaṭey=aṁkakāra[ṁ] braṁ(bra)hm-ādhirājargge **Sa(śa)ka-bhūpāḷa-kāḷ-**
ātikrāṁ-
25 **ta-saṁvatsara-śataṁgaḷ 933neya Sādhāraṇa-saṁvatsara Vaiśākha-**
26 da puṇṇame **Ādityavāradaṁdu Māḷad=Ālūra** baḍagaṇa poladoḷ
27 **Sirivuradiṁd=Iṭṭagege** pōda baṭṭeya Kaṇṇa-kuriṁbana kalla baḍagaṇa
28 deseyoḷ=Siddhēśvara-geyya mūḍaṇa kaṁbi-vaddadoḷ=Allēśvara-geyy=a-
29 daṇa mūḍaṇa kaṁbi-vaddadoḷ nūru mattar=kkeyyaṁ sarvva-bādhā-pa-
30 rihāraṁ namasyav=āge **Māḷad=Ālū[ra*]** irunūrvaruv=iḷd=ūr-oḍeyaṁ Chaṭṭi-
31 vārayyaṁ **Veṇṇeya-bhaṭṭ**ra kālaṁ karchchi kuḍe tat-kāḷadoḷ mahā-
32 janad=adhyakshadoḷ **Veṇṇeya-bhaṭṭar**=ttamm=ārādhyar svasti yama-niya-
33 m-āsana-prāṇāyāma-pratyāhāra-dhāraṇā-dhyāna-samādhi-saṁpaṁ-
34 nnar=appa śrīmat-**Sirivurada** Guhēya-maṭhada **Amarāchārya-**
35 **bhaṭṭārakargge** pāda-prakshāḷanaṁ(na)-pūrvvakaṁ nūru mattar=kkeyyumaṁ
maṭha-
36 mam=ūḍisi maṭhake vidyā-dānav=āge paṁnirvvar=brāhmaṇarggam=aruva-
37 r=ttirpōdhanarggaṁ satrake viṭṭan=Adan=irunūrvvaruṁ sarvva-bādhā-parihāram kā-
38 d=ūḍuvar=Ī dharmmavaṁ pratipāḷisidaṁge Kurukshētradoḷ=sūryya-graha-
39 ṇadoḷ=sāyira kavileyaṁ dēva-brāhmaṇargg=ubhayamukhi-go-
40 ṭṭa phaḷaṁ **Vāraṇāsiyoḷ=sāyira liṁgamaṁ** pratishṭhe-geyda pa(pha)ḷam=a-
41 kkuv=Ī dharmmavan=aḷidaṁg=inituman=aḷida paṁcha-mahā-pātakam=akkuṁ

[1] The first letter of this word looks like *r*. Elliot's pandit has transcribed the word as *Ruditā*.

42 Svaṁ dātuṁ sumahach=chhakyaṁ duḥkham=anyasya pāḷanaṁ [|*] ādānaṁ vā pāḷa-
43 naṁ v=ēti dānāch=chhrēyō=nupāḷanaṁ ∘[||* 2*] Sva-dattāṁ para-dat[t*]āṁ vā yō harēta
44 vasuṁdharāṁ [|*] shashṭiṁ varsha-sahasrāṇi vishṭhāyāṁ jāyatē kṛimiḥ | ∘ (||)
∴[3*] Na visham
45 visham=ity=āhur=brahma-svaṁ ṛisham=uchyatē [|*] visham=ēkākinaṁ haṁti brahma-svaṁ
46 putra-petrikaṁ[1] [|| 4*] . ◎ Prāsāda-chakravarttī Maruḷōjaṁ baredaṁ | maṁgaḷaṁ ◎

TRANSLATION.

(Verse 1.) Inasmuch as his queen was a granddaughter of Taila, the ornament of emperors eminent in Manu's courses, a daughter of the illustrious emperor Satyāśraya, (*and*) a younger sister of the blest emperor king Vikramāditya, how can a panegyrist (*worthily*) describe this Noḷaṁbādhirāja's greatness and (*noble*) race, and high eminence?

(Lines 5-8.) When the reign of—hail!—the asylum of the whole world, favourite of Fortune and Earth, great Emperor, supreme Lord, supreme Master, embellishment of the Chāḷukyas, ornament of Satyāśraya's race, king Tribhuvanamalla, was advancing in a course of successively increasing prosperity, (*to endure*) as long as moon, sun, and stars:—

(Lines 8-14.) While one who finds sustenance at his lotus-feet,—hail!—he who has obtained the five great musical sounds, scion of the Pallava lineage, favourite of Fortune and Earth, ornament of the Pallava race, uniform of speech, lord of Kāñchī best of cities, a Triṇētra [Śiva] of feudatory princes, a warrior of the host [elephant troup.—Ed.], Iriva-Noḷaṁbādhirāja, was happily ruling the Noḷaṁbavāḍi Thirty-two Thousand, the Keṅguḷi Five-hundred, the Ballakunḍe Three-hundred, the Kukkanūr Thirty, and five towns within the Māsiyavāḍi province, so as to repress the wicked and protect the cultured,—

(Lines 14-24.) To one who finds sustenance at his lotus-feet,—hail!—the High General appointed to the whole management of the realm, doing service to his lord, grim on the stage of battle, harsh to the wicked, a Kauṭilya in craft [to the crafty.—Ed.], one who drives away the base, a Bṛihaspati of the Kali Age, an adamant chamber to dependents, a Garuḍa to the serpents his enemies, a great poet in both (*languages*),[2] a favourite with kings of poets, a lion to the elephants disputants, a darling of Sarasvatī, unattainable by other men's wives, a furious elephant to warriors of the host (?), a home of polity, a master of enterprise, one who fails not (*in vow and promise*), a friend to friends, a Brahma of the skilful, delighting in the fray, crushing the Highlands a sun to the lotuses the Brāhmaṇ race, a warrior among Brāhmaṇs, a leader in the Seven Towns, a scion of the Kamma[3] race, of the . . ., *gōtra*, son of Diṇḍa-Paṇḍita, friend of students, ornament of scholars, the great august General Veṇṇeya Bhaṭṭāra, a warrior of the host [elephant troup], an emperor of the Brāhmaṇ order,—

(Lines 24-26.) On Sunday, the full-moon day of Vaiśākha of the cyclic year Sādhāraṇa, the 933rd (year) in the centuries elapsed from the time of the Śaka king,—

(Lines 26-31.) The mayor Chaṭṭivārayya in concert with the Two-hundred of Āḷūr of the Plain, washing Veṇṇeya-Bhaṭṭa's feet, gave as a *namasya* holding, immune from all conflicting

[1] Read *sutrakaṁ*.

[2] Sanskrit and Kanarese.

[3] This family may possibly be connected with the Kamma-rāshṭra or Karma-rāshṭra, on which see *I. A.*, Vol. VII, p. 187, Vol. XV, p. 105, and *E. I.*, above, Vol. VIII, pp. 234, 238. [Karna-Kamma is a well-known sub-sect of Smārta Brāhmaṇa largely found in the Nellore District; Babbūr-Kammi is another.—Ed.]

claims, a field of one hundred *mattar* in the fields north of **Ālūr** of the Plain, on the north side of the road going from **Sirivura** to Iṭṭage (*and*) Kaṇṇa the Shepherd's stone, in the eastern *kambi-vadda* of Siddhēśvara's meadow, (*and*) in the eastern *kambi-vadda* of Allēśvara's meadow;

(Lines 31-38.) Whereupon in the presence of the Mahājanas **Veṇṇeya-Bhaṭṭa** assigned to his preceptor[1] **Amarāchārya-Bhaṭṭāraka** of the Guhēya monastery in Sirivura, who is—hail!—practised in the major and minor disciplines, seat-postures, suppression of breath, withdrawal (*of the senses from their objects*), spiritual concentration, meditation, and absorption, with laving of his feet, a field of one hundred *mattar* for the almshouse for (*the maintenance of*) twelve Brāhmaṇs and six ascetics, so that the monastery may be fed and supply instruction. The Two-hundred shall protect this (*establishment, keeping it*) immune from all conflicting claims, and furnish it with food.

(Lines 38-41.) To him who preserves this pious foundation shall accrue the reward of giving in Kurukshētra during an eclipse of the sun as *ubhayamukhis*[2] a thousand kine to gods and Brāhmaṇs, the reward of consecrating in Benares a thousand phallic images; to him who violates this pious foundation shall accrue (*the guilt of*) the five deadly sins for having destroyed the same number.

(Verses 2-4: common Sanskrit formulæ.)

(Line 46.) The *prāsādu-chakravartti*[3] **Maruḷōja** was the writer (*of this edict*). Happiness!

No. 8.—THREE INSCRIPTIONS OF LAKSHMESHWAR.

By Lionel D. Barnett.

The site of **Lakshmēshwar** town and its ancient names of **Poṛigere, Puligere, Purigere, Purikara,** and **Pulikara** have already been discussed in this journal (above, Vol. XIII, p. 178, XIV, p. 188). As befits its former importance, it contains a considerable number of inscriptions, among them the following three, which were found on stones in the local temple of Sōmēśvara by Elliot's pandit and copied by him. They all bear upon the history of the cult of **Mahā-svayambhu-Sōmēśvara.** The first of them (No. A.) appears in the Royal Asiatic Society's copy of the Elliot Collection on fol. 262a of Vol. I, the second (No. B.) on fol. 302b *ibidem*,[4] and the third (No. C.) on fol. 504a *ibidem*. All three were subsequently removed to the local *kachēri*, where ink-impressions of them were prepared for the late Dr. Fleet, which are now in the British Museum. From these I have edited the text. A facsimile and summary of C. is given in *PSOCI.*, No. 97.

A.—OF THE REIGN OF VIKRAMADITYA VI: YEAR 27.

The stone bearing this record has a rectangular top containing sculptures, namely, in the centre a *liṅga* on a stand, with a squatting bull on the proper right and a cow suckling a calf surmounted by the sun (right) and moon (left). Below this is the inscribed area, in two

[1] *Ārādhya*, literally "worshipful one," the title of a class of Śaiva Brāhmaṇs.

[2] See above, Vol. XIII, p. 15.

[3] Literally, "emperor of palaces": it seems to be a title of a stone-mason. Cf. *samaya-chakravartti*, of a merchant (above, Vol. XIII, p. 21).

[4] With the note that it was on a stone in a row of slabs standing along the outer wall of the temple, beside the doorway.

compartments: the first, containing l. 1, is about 2 ft. wide and $2\frac{1}{4}$ in. high, and the second (ll. 2-53) is about 2 ft. wide and 4 ft. 7 in. high.—The character is good Kanarese of the period, with letters varying in l. 1 from $\frac{3}{8}$ in. to $\frac{1}{2}$ in. in height, and in ll. 2-53 from $\frac{7}{16}$ in. to $\frac{9}{16}$ in. The subscript *ch* (see ll. 14, 30, etc.) is almost exactly like subscript *dh*.—The language is Old Kanarese, except in the formal Sanskrit verses Nos. 1, 7-9. The *ḷ* has been changed to *ḷ* throughout, but *p* is preserved. The spelling *bhāvinas=p°* (l. 49), for the more regular *bhāvinaḥ=p°*, is noteworthy. The word *aḍḍāgara-vāḍi* (l. 37) seems new.

The record first refers itself to the reign of **Tribhuvanamalla**, i.e. **Vikramāditya VI** (ll. 2-5), and then introduces in verse and prose the High Minister and General **Bhīvaṇayya**, or **Bhīma**, a native of Kashmīr, who held the title of *mahā-sāmantādhipati* and filled several important offices, being at the time the administrator of the Palasige Twelve-thousand and the controller of the *achchu-pannāya*, one of the departments of taxation (ll. 5-15).[1] Next come four verses and a prose description of Bhīvaṇayya's subordinate the General **Mādhava-Bhaṭṭa**, a soldier, statesman, and man of taste, who was a High Minister and "president" (*adhishṭhāyaka*, probably head of the local department) of the *achchu-pannāya* (ll. 15-31). The following paragraph (ll. 31-43) gives the date and details of an endowment granted by Mādhava to the temple of **Svayambhu-Sōmēśvara**[2] at Purigere and to the associated cult of Muddēśvara out of the fiscal revenues controlled by him, the trustee being **Mahēndrasōma**, the prior of the local monastery.

The date is specified on ll. 32-33 as the 27th year of the Chāḷukya-Vikrama era, Chitrabhānu; Āshāḍha śu. 5; Sunday; a *vyatīpāta*. This is regular, so far as it goes: the given *tithi* corresponded to **Sunday, 22 June, A.D. 1102**, on which day it ended 17 h. 30 m. after mean sunrise (for Ujjain).[3]

The only **geographical names** mentioned are: **Kāśmīra** (l. 10); the **Palasige Twelve-thousand and the Seven and a half Lakh Country** (l. 14); **Purigere** (ll. 35, 36, 38); and the *tīrthas* (ll. 43 f.). Palasige is the modern Halsī, situate in lat. 15° 32′ and long. 74° 36′. Purigere, also called Puligere and later Huligere, with the Sanskritised bye-form Purikara, is the modern Lakshmēshwar.

TEXT.[4]

[Metres: vv. 1, 7, 9, *Anushṭubh*; vv. 2, 6, *Mattēbhavikrīḍita*; vv. 3, 5, 10, *Kanda*; v. 4, *Champakamālā*; v. 8, *Śālinī*.]

1 Namaḥ(ma)s=tuṁga-śiraś-chuṁbi-chaṁdra-chāmara-chāravē trailōkya-nagar-āraṁbhaṁ(bha)-mūḷa-staṁbhāya Sa(śa)ṁbhavē || [1*]

2 Svasti samasta-bhuvan-āśraya Śrī-Pṛithvī-vallabha maḥārājādhirāja para-

3 mēśvara paramabhaṭṭārakaṁ **Satyāśraya**-kuḷa-tiḷakaṁ **Chāḷuky-ābharaṇaṁ** śrīmat-**Tri-**

4 **bhuvanamalla-dēvara** vijaya-rājyam=uttarōttar-ābhivṛiddhi-pravarddhamānam=ā-

5 chandr-ārkka-tāraṁ baraṁ saluttam-ire [1*] tat-pāda-padm-ōpajīvi || Vṛitta || Dhuradoḷ=tāne

6 dhuraṁḍa(dha)raṁ samuchit-āpt-āḷōchan-āgrēsar-āṁtaradoḷ=tāne samagra-maṁtri peṛar=i-

7 l[1*]=eṁd=iṁtu kāruṇyadiṁ pored=āḷdaṁ charitakke mechchi piriduṁ koṇḍ-āḍe daṇḍādhināth-

[1] See *Dyn. Kanar. Distr.*, p. 451.

[2] On the significance of the title *Svayambhu* see my paper on the Kurgōḍ inscr. B. above, Vol. XIV, p. 278.

[3] I have to thank Mr. Robert Sewell for his help in calculating the dates of the inscriptions in this paper.

[4] From the ink-impression.

8 roḷ=iṁt=orvvane jīya bāpp=enisidaṁ śrī-Bhīma-daṇḍādhipaṁ || [2*] Svasti samadhigata-paṁcha-

9 mahā-śabda-mahāsāmaṁtādhipati mahā-prachaṇḍa-daṇḍanāy[a]ṁ śishṭ-ēpṭa(shṭa)-

10 jan-ābhīshṭa-phaḷa-pradāyakaṁ nuḍid=aṁte gaṇḍaṁ saujan[y]a-vanaja-vana-mārttaṇḍaṁ Kāśmīra-vi-

11 shaya-mukha-maṇḍanaṁ svāmi-vaṁchaka-śiraḥ-khaṇḍana[ṁ] śrīma[t*]-Tribhuvana-malla-dēva-pā-

12 d-ābja-bhri(bhṛi)ṁga sāhas-ōttuṁga nām-ādi-samasta-praśasti-sahita śrīman-mahā-pra-

13 dhānaṁ sāvāsigaḷ=adhishṭhāyakam mane-verggaḍe pattaḷe-karaṇaṁ daṇḍanāyaka Bhī-

14 vaṇayyaṁgaḷu Palasige-paṁnirchchāsiramumaṁ Sapt-ārddha-lakshey=achchu-paṁnāyamu-

15 man=āḷuttam-ire [t*] tat-pāda-padm-ōpajīvi ⊕ Ka || Abhimāna-Mēru vitaraṇa-vibhū-

16 shaṇaṁ dharmma-Dharmmarāja-tanu(nū)jaṁ vibhav-aika-Divijārājaṁ prabhu-maṁtr-ōtsāha-

17 śakti-guṇa-saṁpaṁna || [3*] Vṛi || Kadanadoḷ=āṁtaraṁ tuḷidu kolv=eḍeyoḷu laya-

18 kāḷa-Kālan=embudu baḍa-paṭṭu bēḍidavargg(rg)=īvaḍe jaṁgama-kalpa-vṛiksham=eṁbu-

19 du śaraṇ=eṁdu baṁd=eḷase kāv=eḍeyoḷu driḍha[1]-vajra-gēham=eṁbudu manad=akkaṛiṁ vi-

20 bdha[2]-maṇḍali Mādhava-daṇḍanāthanaṁ || [4*] Ka || Mattina nirasta-guṇaran=anuttamaraṁ paḍedu-

21 darkke dhātraṁ prāyaśchitta[ṁ]-geydaṁ paḍedu budh-ōttamanaṁ Manu-charitranaṁ Mādhavana || [5*]

22 Vṛi || Dayeyoḷ dharmmadoḷ=ārppinoḷ vibhavadol=gāṁbhīryyadol dhairyyadoḷ na-

23 yadoḷ chāru-charitradoḷ vinayadol chāturyyadoḷ śauryyadoḷ ni-

24 yat-āchāradoḷ=oḷpinoḷ bahu-kaḷā-vijñānadoḷ=tāne dhātriyoḷ=atyunnata-

25 n=ādan=ūrjjita-yaśō-lakshmī-dhava[ṁ] Mādhava[ṁ] || [6*] Svasti samasta-vastu-guṇ-āḷaṁkri(kṛi)ta

26 mahāmātya-padavī-virājamāna mān-ōṁnata prabhu-maṁtr-ōtsāha-śakti-traya-

27 saṁpaṁna vibdha[3]-prasa[ṁ]na sukara-kavitā-rasa-vichāra-chāru-Chaturānanaṁ madavadh(d)-a-

28 ri-karīṁdra-paṁchānanaṁ baṁdhu-jana-vanadhi-śarat-samaya-pūrṇṇa-sudhāka-

29 ra[ṁ] saujanya-ratnākaraṁ śrīmad-Bhav[ā*]nīnātha-pād-ābja-bhri(bhṛi)ṁgaṁ sāhas-ōttu[ṁ]-

30 ga nām-ādi-samasta-praśasti-sahitaṁ śrīman-mahāpradhānan=achchu-

31 paṁnāyad=adhishṭhāyakaṁ daṇḍanāyakaṁ Mādhava-bhaṭṭar Svasti

32 śrīmach-Chāḷukya-Vikrama-kālada 27neya Chitrabhānu-sā(sa)ṁvatsa-

33 rada Āśāḍa-suddha[4] 5 Ādityavāramu[ṁ] vyatīpātadaṁdu śrīmad-ūa-

34 ṇḍanāyakaṁ Mādhava-bhaṭṭar=achchu-paṁnāyamaṁ sukhadin=āluttam-irdd-

35 śrī-rājadhāni paṭṭaṇaṁ Purigeṛeya śrī-Svayaṁbhu-Sōmēsva(śva)ra-dēva-

36 ra Muddēsva(śva)ra-dēvar=aṁga-bhōgakke Purigereya 48 sāsira mattar=bhūmi-

37 yiṁd=oḷag=eleyaṁ māṛuva taḷad=okkaluv=aḍḍāgara-vāḍiy=āgi pērina-

[1] Read *dṛiḍha-*. [2] Read *vibudha-*. [3] Read *vibudha-*.
[4] Read *Āshāḍha-śuddha*.

38 ḷum tale-voṛeyal=elli taṁdaḍaṁ dēvargge pannāyada suṁkamumam **Purigere-**
39 yalu māṛuv=eleya paṁnāyamuman=atta suṁkav=ikki baṁdu māṛu-
40 va pēṛiṁg=ele 530 tale-voṛege 300 lāvaṇige vokkal-deṛe daṁṇḍa-dōsa(sha)v=int=
inituva-
41 n=alliya sthān-āchāryyara **Mahēndrasōma-paṇḍitara** kāl-garchchi dhārā-pūrvva-
42 kaṁ māḍi biṭṭar=Int=i dharmmamaṁ paṁnāyaman=āḷv=arasugaḷu pratipāḷisu-
43 varu ⊛ Idaṁ kād-ātaṁ Vāraṇāsi Kurukshētra[ṁ] Prayāge Arggbyatī-
44 rttbaṁ Gaṁge Gayey=emba mahā-puṇya-tīrtthaṁgaḷoḷu sāsira kavileyaṁ(ya) kō-
45 ḍuṁ koḷagumaṁ paṁcha-ratnadal=kaṭṭisi sāsirvvar vēda-pāragar=appa
brāhmaṇargg=ubhaya-
46 mukhi-goṭṭa phalam=akkum=idan=aḷid-ātaṁg=anituman=aḷida paṁcha-mahā-pātakan=
akkuṁ |
47 Sva-dattāṁ para-dattāṁ vā yō harēta vasundharā[ṁ] [1*] shashṭir=varirsha[1]-
sahaśrā(srā)ṇi vishṭā(shṭhā)yāṁ
48 jāyatē kṛimi[ḥ*] || [7*] Sāmānyō=yaṁ dharmma-sētur=nnṛipāṇāṁ kālē kālō
pālanīyō
49 bhavadbhis=[1*]sarvvān=ētān bhāvinas(ḥ)=pārtthivēṁdrān bhūyō bhūyō yāchatē R[ā]-
50 machaṁdra[ḥ*] || [8*] Bahubhir=vvasudhā bhuktā rājabhis=Sagar-ādibhiḥ [1*] yasya
ya-
51 sya yadā bhūmi[s*]=tasya tasya tadā phalaṁ || [9*] Idan=ā-chaṁdr-ārkkaṁ baram=
udi-
52 t-ōditam=āge kādavar=pparama-sukh-āspadha(da)r=appar pāpadin=aḷida
53 durātmar=nnaraka-gatige gaḷagaḷan=iḍi(ḷi)var || [10*] Maṁgaḷa mahā-śrī śrī ⊛

TRANSLATION.

(Verse 1.) Homage to Śambhu, beauteous with the yak-tail fan that is the moon kissing his lofty head, the foundation-column for the structure of the city of the triple world,

(Lines 2-5.) While the victorious reign of—hail!—the refuge of the whole world, darling of Fortune and Earth, great Emperor, supreme Lord, supreme Master, ornament of **Satyāśraya's** race, embellishment of the **Chāḷukyas**, king **Tribhuvanamalla**, was advancing in a course of successively increasing prosperity, (*to endure*) as long as moon, sun, and stars;—one who finds sustenance at his lotus-feet—

(Verse 2.) As the sovereign, saying that "he is the leader in battle and likewise a perfect counsellor among the most capable of fitting and reliable deliberations, there are no others (*equal to him*)," thus graciously has aggrandised him, and, being pleased at his conduct, abundantly praises him, hence the blest General **Bhīma** alone among generals is addressed with *jīya* and *bāppu*.[2]

(Lines 8-15.) Hail! while the *mahā-sāmantādhipati* who has obtained the five great musical sounds, great august General, bestower of desirable rewards upon cultured and agreeable persons, man of might according to his word, sun to the park of the lotuses of nobility, ornament on the face of the province of **Kashmir**, decapitator of traitors against his lord, bee to king **Tribhuvanamalla's** lotus-feet, exalted in bravery, High Minister, president of the intendants, steward of the household, provincial[3] registrar, the General **Bhīvaṇayya**, was administering

[1] Read *-vat sha-*.
[2] Words expressing high approval and admiration.
[3] On the term *pattaṇa* cf. Narēndra inscrs. B., Vol. XIII, p. 325, n. 3.

the Palasige Twelve-thousand and the *achchu-pannāya* of the Seven-and-a-half Lakh Country[1] :—one who finds sustenance at his lotus-feet—

(Verse 3.) A Mēru in pride, distinguished by bounty, a Dharmarāja's son [Yudhishṭhira] in righteousness, a unique King of Celestials [Indra] in magnificence, endowed with the excellences of the powers of lord, counsel, and enterprise—

(Verse 4.) With affection of spirit the congregations of sages name the General **Mādhava**, on the occasion of his trampling down and slaying those who confront him in battle, a Spirit of Doom of the time of dissolution ; on the occasion of his making gifts to impoverished suitors, a walking Tree of Desire ; on the occasion of his giving protection when men come and pray for refuge, a solid adamantine house.

(Verse 5.) By generating Mādhava, who is the best of sages, who follows the course of Manu, the Creator made atonement for having created other inferior men of reprobate character.

(Verse 6.) In mercy, righteousness, power, magnificence, profundity, firmness, policy, pleasing conduct, courtesy, skill, valour, regular practice of duty, excellence, (*and*) knowledge of many arts, **Mādhava** has become exceedingly exalted on earth, a lord of the goddess of splendid fame.

(Lines 25-31.) Hail ! he who possesses all titles of honour such as "he who is adorned with all positive virtues, illustrious in the office of High Minister, exalted in dignity, endowed with the three powers of lord, counsel, and enterprise, gracious to sages, a charming Brahma in appreciation of sentiments of skilful poetry, a lion to the great elephants proud foemen, a full moon of the autumnal season to the ocean of his kindred, a jewel-mine of nobility, a bee to the lotus-feet of Bhavānī's Lord [Śiva], lofty in valour," the High Minister, Controller of the *achchu-pannāya*, (*and*) General **Mādhava-Bhaṭṭa**—

(Lines 31-33.) Hail ! on **Sunday, the 5th of the bright fortnight of Āshāḍha** in the cyclic year **Chitrabhānu**, the **27th** (*year*) of the **Chāḷukya-Vikrama era**, during a *vyatīpāta*,[2]—

(Lines 33-43.) The General **Mādhava-Bhaṭṭa**, while happily administering the *achchu-pannāya*, for the personal enjoyment of the god **Svayambhu-Sōmēśvara** (*and*) the god Muddē-śvara of the capital city **Purigere**, presented to the gods, with laving of the feet of **Mahēndra-sōma Paṇḍita**, prior of the local establishment, and with pouring of water, the *pannāya* tax (*collected*) wherever tenants of estates selling betel-leaf within the 48,000 *mattar* of the lands of Purigere bring (*the leaf*) in loads conveyed either on shoulder-poles (?) or in head-loads, likewise the *pannāya* on betel-leaf sold in Purigere, likewise a total of 530 leaves on each load and 300 on each head-load sold there after deduction of the tax, together with tenants' tax and fines for offences. So the governors[3] administering the *pannāya* shall maintain this pious endowment.

(Lines 43-46 : a prose formula of the usual type.)

(Verses 7-9 : common Sanskrit verses.)

(Verse 10 : a Kanarese commonitory stanza.)

B.—OF THE REIGNS OF VIKRAMADITYA VI (YEAR 32) AND TAILA III (YEARS 3 & 4).

The stone bearing this inscription has suffered some damage, a considerable portion having been broken off on the proper left side, from the top down to line 15. About half of the

[1] The *achchu-pannāya* was one of the branches of taxation. On the Seven-and-a-half Lakh Country see *Dyn. Kanar. Distr.*, p. 341, n. 2.

[2] A *yōga* in which the declination of sun and moon are equal.

[3] This use of *arasu* in reference to civil officers of the Crown deserves notice, especially in connection with Dr. Fleet's remarks in *Dyn. Kanar. Distr.*, p. 429. Cf. below, p. 50, n. 2.

3 śrīmat-Purikara-pura-lakshmi-maṇḍanan=Abhavaṇ = ubhaya - bhava - hita - karan = urvvī-
mahitan=enipa **Dakshi**[ṇa-**Sōm** . . .]
pad-ārā[dha]karaṁ || [3*] Nandiyum=Agajeyuv=uttaṁs-ēnduvum=udyaj-
jaṭā-kaḷāpamum=initum̐ sanda **S**[vayaṁbhu(?) . . .]

5 ge **Chaḷuki**-vaṁś-ōttamaraṁ || [4*]

6 Śrīmach-**Chaḷukya**-vaṁśa-lalāmaṁ vidvishṭa-rāya-jagadaḷan=akhiḷ-ōrvvī-
maṇḍanan=apratim-ōddāmaṁ **Permmāḍi-rā**[‿‿ ‿‿ ‿‿ ‿‿ ||] [5*]

7 Śaraṇ-āyāta-kubhṛit-kuḷa-prakaramaṁ vārāśiy=eṁt=aṁte bittaradiṁ rakshisi
Tailap-āvanipan=iṁ **Satyāśray-ō**[rvvīśvaraṁ(?) ‿ ‿ — — ‿ **Chaḷukya**]-

8 vaṁśa-lalanā-lāḷāṭa-lakshmaṁ vasuṁdhareyaṁ tāḷdidan=atyūdātta-mahimaṁ śrī-
Vikram-ōrvvīśvara || [6*] Pariy-i[— — ‿ — — ‿ ‿ ‿ ada]-

9 ṭiniṁ **Chōḷanaṁ** chāḷanaṁ-geyd=ariyiṁ **Nēpāḷa-bhūpāḷanan=adaṭ-aledaṁ Gūrjjar-**
ōrvvīśa-rājat-puramam nirdhdhāma-dhū[ma ‿ ‿ ‿ ‿ ‿ ‿ —]

10 suṭṭan=oṭṭaysid=urvvīśara bēraṁ bēradiṁ kirtt=aledan=anupamaṁ **Vikramāditya-**
dēvaṁ || [7*] Svasti samasta-bhuvaṇ-āśraya [Śrī-Pṛithvī-vallabha mahā]-

11 rājādhirāja paramēśvara paramabhaṭṭāraka **Satyāśraya-kuḷa-tiḷakaṁ Chāḷuky-**
ābharaṇaṁ śrīmaṭ-**Tribhuvanama**[lla-dēvara vijaya]-

12 rājyav=uttarōttar-ābhivṛidhdhi-pravardhdhamānam=ā-chaṁdr-ārkka-tāraṁ baraṁ
saluttam-ire || Tat-pāda-padm-ōpajīvi || Ka || **Bana**[vāsī ‿‿ ‿‿
‿‿]

13 n=anagha-**Jayamtī-pur**-ēśa-Madhukēśa-jagaj-jana-vaṁdya-pada-sarōj-ārchchana-tatparan=
udgha-samara-lōlaṁ **Tailaṁ** [8*] || Vṛi || Janaka[ṁ — ‿ ‿ — ‿ —]

14 r-ddaḷana-dakshaṁ **Śānta**-bhūpāḷan=ātana mā-dēvi samagra-puṇyavati dal tāy=
tām **Śriyā-dēvi** **Taila**-nṛipaṁ **Māvuli Chōki Bikkiy**=enip=ī bhū[pā]-

15 ḷa-jāḷaṁ yaśō-dhanar=ēm puṇyamo sat-kanīya-janaka[r=*]śrī-**Taila-bhūpāḷana** || [9*]
Baliy=eṁt=aṁte tadīya-dēśaman=adam nirvvādheyiṁd=āḷdu me[y-ga]-

16 li dik-kuṁbhiya kuṁbha-saṁbhṛita-lasat-siṁddhū(dū)ra-rāg-āviḷa[ṁ] baḷa(la)vat-
tējaṁ=enal dharā-vaḷayamaṁ niḥka(shka)ṁṭakam māḍidaṁ paḷaruṁ baṇṇisa-

17 l=udhdhat-āri-daḷanaṁ **Kādaṁba-kaṇṭhīravaṁ** || [10*] Svasti samadhigata-
paṁcha-mahā-śabda-mahāmaṇḍaḷēśvaraṁ **Banavāsī-puravar-ādhīśvaraṁ**

18 [Jaya]ṁtī-**Madhukēśvara-dēva-labdha-vara-prasādaṁ** sahaja-mṛiga-mad-āmōdaṁ
Tryaksha-kshmā-saṁbhavaṁ chatur-asī(śī)ti-nagar-ādhishṭhita Lalāṭa-

19 [lōchana-Cha]turbhbhujaṁ(ja)-jagad-vidit - āshṭādaś- āśvamēdha - yajña - dīkshā-dīkshitaṁ
Himavad-girīṁdra-ruṁdra-śikhari(ra)-śṛṁgharāyamāna(ṇa)-mahā-spha-

20 [ṭika-śilā-staṁ]bha-badhdha-mada-gaja mahā-mahim-ābhirāmaṁ **Kādaṁba-chakri**
Mayūravarmma-mahā-mahipāḷā-kula-bhūshaṇaṁ permma-

21 [ṭṭi-tū]ryya-nirgghōshaṇaṁ sā(śā)khācharēṁdra-dhvaja-virājamāna mān-ōttuṁga-
siṁha-lāṁchchhanaṁ datt-ārtthi-kāṁchanaṁ samara-jaya-kāraṇaṁ **Ka**-

22 [daṁb-ā]bharaṇaṁ mār-kkoḷvara gaṇḍaṁ nām-ādi-samasta-praśasti-sahitaṁ
śrīman-mahāmaṇḍaḷēśvaraṁ **Tailaha-dēvarasar=Ppānuṁgall=a**-

23 [yn]ūraṁ tribhōg-ābhyantara-siddhiyiṁ dushṭa-nigraha-viśishṭa-pratipāḷaneyiṁd=āḷd=
arasu-geyyuttaṁ **Pānuṁgalla** nele-

24 [vī]ḍinoḷ sukha-saṁkathā-vinōdadiṁd=iral=ittal || Vṛi || Tevar=ellaṁ dēvatā-
mandira-nivahame nimna-sthaḷī-rājiy=ellaṁ suvirāja-

25 d-dīrggikā-saṁkuḷa-bharita-payaḥ-pūra-nīrōja-kāsārave maṭṭaṁ tat-samāḷaṁkṛita-
vasudhey=ad=ellaṁ lasach-chamdan-ōdyānav=enal ra-

26 mya[ṁ*] dal=enduṁ **Purikara**-nagarī-līle lōk-āvalōkaṁ || [11*] Mattam=alli || Kaṁ || Ond=oṁd=akshateyaṁ sānandadin=abhyarchchisalke koḷagaṁ tīvitt=emdo-

27 ḍe Śiva-liṁgada sama-sanda mah-ōnnatiya pavaṇan=aṛiyeṁ pogalal || [12*] Kaḍeyada kaṁḍarisada bēr-ppaḍisada kammayisad=oṁd=akṛirttri(tri)-

28 ma-rūpaṁ paḍeda[ṁ ?] **Svayaṁbhu** neladiṁd=oḍedu dayaṁ-geydan=alli **Dakshiṇa-Sōmaṁ** || [13*] Int=enisida **Mahā-svayaṁbhu-Sōmanātha-dēvara**

29 sthān-āchāryyaṁ || Kaṁ || Suvrata-niḷayaṁ sakaḷa-mahā-vrati-santāna-kalpa-bhūjaṁ **Daśavarmma**-vraja-niyuktan=esedaṁ pravrajya-**Mahēm-**

30 **drasōma-paṇḍita-dēvaṁ** || [14*] Intu śama-dama-yama-niyama-nishṭhā-garishṭhan=appa **Mahēṁdrasōma-paṇḍita-dēv** r=mmahā-

31 mahiman=appa Sōmanātha-dēva-divya-śrī-pād-ārchchan-āḷaṁkṛita-ghuśṛi(sṛi)ṇa-maśṛi(sṛi)ṇa-chandan-āuulēpa-sugandha-gandhamumaṁ tat-prasā-

32 da-śēsh-ākshataṁgaḷumaṁ koṇḍu **Pānuṁgallige** pōgi mahā-maṇḍaḷēśvaraṁ **Tailaha-dēvanaṁ** parasuvuduṁ harsh-ōtkarsha-chittan-āgi sthā-

33 na-viśēshamumaṁ dēvatā-viśēshamumaṁ manade-goṇḍu Sōmanātha-dēvargg=aṁga-bhōgakke namma nāḍoḷ=oṁd=ūraṁ kuḍuvam=eṁdu vichā-

34 risi śrīkaraṇa-pradhāna-sēnādhipa-purassaraṁ svasti śrīmach-**Chāḷukya-Vikrama-saṁvatsarada 32neya Sarvvajit-saṁvatsarada Pu-**

35 **shya-śuddha 13 Ādi-vārav**=uttarāyaṇa-saṁkramaṇa-vyatīpātaṁ kūḍida puṇya-tithiyoḷ **Pānuṁgall**=aynūrara kaṁ-

36 paṇaṁ **Kundavura**-mūvattara baliya bāḍaṁ **Kallavaṇamaṁ** śrī-Sōmanātha-dēvargg=aṁga-bhōgakk=ā-chaṁdr-ārkkaṁ sthāyiy=āgi

37 sarvva-namaśya(sya)muṁ sarvva-bādhā-parihāramum=āgi pāramēśvara-dattiy=āgi tāṁvra-śasana-sahitaṁ **Mahēm-**

38 **drasōma-paṇḍitara** kālaṁ karchchi dhārā-pūrvvakaṁ māḍi biṭṭaṁ | ◎ Ślōkaṁ ◎ Sva-dattāṁ para-dattāṁ vā yō harēta vasu-

39 ndharāṁ [|*] shashṭi[r*]-varsha-sahasrāṇi vishṭhāyāṁ jāyatē kṛimiḥ || [15*] Kaṁ || Gaṁgā-sāgara-Yamunā-saṁ[ga]madoḷ kōṭi-kavi-

40 leyaṁ brāhmaṇaraṁ liṁgigaḷaṁ sale puṇya-dinaṁgaḷoḷ=aḷidavargaḷ=appar=int=idan=alidar || [16*] ◎ Pratipāḷisidavargg=ananta-puṇya-phaḷa ◎ ◎

41 Śrī-vadhu tanna pēr-uradoḷ=udgha-jay-āṁgane tōḷoḷ=oppe dhātrī-vadhuv=ichhekārtti kaḍugū(gu)tt-ire chāru-**Chaḷukya**-vaṁśa-rājīva-

42 vikāśan-ōllasita-chaṇḍakaraṁ negardda(rda)ṁ samasta-dhātrī-vaḷay-ēśan=**Irmmaḍi-Paḍirmmaḍi-Nūrmmaḍi-Taila**-bhūbhu[ja]ṁ || [17*] Svasti samasta-bhuvan-ā-

43 śrayaṁ Śrī-Pṛithvī-vallabha mahārājādhirāja paramēśvara paramabhaṭṭāraka **Satyāśraya**-kuḷa-tiḷakaṁ **Chāḷuky**-ābharaṇaṁ śrī-

44 mat-**Traiḷōkyamalla-dēvara** vijaya-rājyav=uttarōttar-ābhivṛidhdhi-pravardhdha-mā[na]m=ā-chaṁdr-ārkka-tāraṁ baraṁ saluttam-ire || Ta-

45 t-pāda-padm-ōpajīvi ◎ **Kādaṁba**-kuḷa-prabhava-prādurbhbhāvaṁ **Jayanti-Madhukēśvara**-dēv-ōdita-vara-prasādan=iḷā-dayita[ṁ*]maṇḍa-

46 ḷēśa **Māvuli-Tailaṁ** || [18*] **Nareyaṁgal** nele-vīḍ=ene parigrahaṁ praje-gal=āpta-varggaṁ paḷeyar=ppiriya śrīkaraṇad-avar=vvara-maṁtri-

47 gal=oṁdu poreyal=udyatan=ādaṁ || [19*] Santāna-sthaṁ nṛipa-padaman=taḷeduṁ dharmma-tatparaṁ **Taila**-nṛipaṁ mantaṇav=ēno paratr-ānanta-

48 sukhakk=eḷasi puṇya-bhājanan=ādaṁ || [20*] Antu katipaya-saṁvatsaraṁ tad-
rājya-lakshmiyan=aḷaṁkaris-irddu **Kādaṁba-kaṇṭhīravaṁ Tailaha-**
49 **dēvaṁ** Sōmanātha-dēva-darśana-vrata-prabhāvadiṁd=ire || Asi-dhārā-vratamaṁ
sādhisi jaya-vadhu vāṇi bāṇa-mukhamaṁ sale
50 sādhisi baṁdu bhujadoḷ=āsyadoḷ=esed-irppaḷ **Vīra-Pāṇḍya**-bhūpāḷakana || [21*]
Ā mahā-maṇḍaḷēśvaraṁ **Puligeṛe-nāḍa** manneyama-
51 n=āḷd=arasu-geyyutt-ire || [1]**Purikara=dēśamumaṁ** baṁdhuratara-**Banavāse-**
dēśamaṁ mēl-āḷke nirantaram=āgal=āḷdan=atidurdhdha-
52 ra-dhairyyaṁ daṇḍanātha-**Mahadēvarasaṁ** || [22*] Ā prachaṇḍa-daṇḍanāthana
besadiṁ **Puligeṛe-nāḍaṁ Biddaṁ(dda)rasa**-daṇḍanāthanuṁ mahāpra-
53 dhān-ōttaman=**Attirājanum**=āḷdar=avara prabhāvam=ent=ene || Kaṁ || Eraḍaṁ
nuḍiyada saṁgara-dhareyoḷ- beṁ-guḍada para-
54 vadhū-kēḷiyan=ācharisada peṁpinoḷ=āvaṁ dore parikise **Biddarāja-daṇḍādhipanoḷ** ||
[23*] Madhura-vachō-Vāchaḥpa-
55 ti vidhu-viśada-yaśaṁ vinūta-shāḍguṇya-nay-āṁbudhiy=eṁdoḍ=itarar=eṇeyē pradhāna-
sēnādhipatyan=**Attiparāja** [||* 24*]
56 ❁ Svasti samasta-praśasti-sahitaṁ śrīman-mahāmaṇḍaḷēśvaraṁ **Māvuli-Tailaha-**
dēvaṁ Sōmanātha-dēva-darsha(rśa)na-vrat-ō-
57 dyāpan-ārtthaṁ śrīmad-rājadhānī-paṭṭaṇaṁ **Puligeṛege** baṁdu Sōma-dēva-pada-
nakha-mayū[kh-ō*]llēkha-lēkh-āpagā-pravāha-
58 diṁ pavitrīkṛita-śarīran=āgi kshīra-dhārā-pūradiṁ sahasra-gaddugeyaṁ koṭṭu
dēvargge munnaṁ tamm=ajjaṁ **Piriya-Tailaha-dēvaṁ**
59 [b]iṭṭa dēva-bhōgaṁ **Kallavaṇamaṁ** punar-ddattiy=āgi svasti śrīmach-**Chāḷukya-**
Traiḷōkyamalla-dēva-varshada 3ney=Āṁgira-saṁvatsarada
60 **[P]ushya-śuddha 8mi Sōmavārav**=uttarāyaṇa-saṁkramaṇa-vyatīpātaṁ kūḍida puṇya-
tithiyoḷ śrī-Svayaṁbhu-Dakshiṇa-Sōmanā-
61 tha-dēvargg=aṁga-bhōgakke **Kal[l]avaṇada** mē[l-ā]ḷke manneyaṁ kāṇikey=āya-
dāya-kiṛu-kuḷa-sahitaṁ sarvv-āya-śudhdhiy=āgi pūrvva-da-
62 tti-kramadalu sarvva-namaśya(sya)muṁ sarvva-bādhā-parihāram=āgi alliya sthān-
āchāryyaṁ **Jñānasōma-paṇḍita-dēva-**
63 [ra kā]laṁ karchchi dhārā-pūrvvakaṁ māḍi **Pānuṁgall=aynūṛaṛa** prabhu-
gāvuṇḍugaluṁ śrīkaraṇa-pradhāna-sēnādhipati-sahitaṁ **Nareyaṁ-**
64 **galla** nele-vīḍinoḷ=irddu tad-grāmamaṁ biṭṭa || Svasti śrīmach-**Chāḷukya-**
Traiḷōkyamalla-varshada 4neya Śrīmukha-saṁvatsarada Chai-
65 **trad=amavāśe(se) Sōmavāradaṁdu Hānuṁgall=aynūṛaṛa** daṇḍanāyakaṁ **Ḍākarasa-**
num, śrīkaraṇaṁgaḷuṁ śrī-Sōmanātha-dē-
66 vara naṁ(ni)tya-naṇḍā-dīvigege **Hānuṁgall=aynūraṛa** grām-ānugrāmadalu praty-
ēkaṁ biṭṭa paṇav=oṁdu ❁ Vṛi ❁ Tanag=ārādhyaṁ [t]r[i]-
67 [l]ōkī-pati vibudha-nutaṁ Sōmadēv-ādhipa[ṁ] saj-janakaṁ **M[ā]hēṁdrasōmaṁ**
janani vinuta-chāritre tāṁ **Māḷiyakkaṁ** vinay-āḷaṁkārey=ēṁ
68 dhan[y]ano guṇa-gaṇa-vārāśi-[sa]ṁpūrṇ[ṇ]a-sōmaṁ muni-saṁtān-ōtpaḷ-ō[—]ita-[2]
vipuḷa-lasat-sōman=ī **Jñānasōmaṁ** || [25*] ❁ Ślōka ❁ Ba-
69 hubhir=vvasudhā dattā rājabhis=Sagar-ādibhir=[]*]yyasya yasya yadā bhūmis=tasya
tasya tadā phalaṁ [||* 26*] ❁ Bhū-vinutaṁ rūvāra-ka-
70 ḷā-vida-**Jinnōjan**=agra-putraṁ **Chāvaṁ** kēvaḷame savaṇ=ballara dēvaṁ **Rājōjan**=
ivargal=esedar=dhdhareyoḷ [||* 27*] ❁ **Rājōjana** kaṇḍarane ❁ ❁ ❁

[1] The second *pāda* of this verse will not scan. [If *maṁ* of the word *dēśamaṁ* is dropped, the difficulty disappears. In this case *dēśa-mēl-āḷke* must be written together.—H. K. S.]

[2] The ink-impression is here very indistinct; the traces suggest *-ōjvāḷitā-*.

TRANSLATION.

(Verse 1.) Victorious ever is he who is composed of accumulated bliss, of knowledge, and of power, from whose mere will arose all the . . . worlds.

(Verse 2: identical with verse 1 of inscr. A. above.)

(Verse 3.) May [the god Sōmanātha of] the South, who is known as Abhava [Śiva], embellishing the fortune of the blest city **Purikara**, causing weal in both spheres of existence, [bless] the worshippers of his feet.

(Verse 4.) Nandi, the Mountain's Daughter, the diadem moon, the tall pile of braided locks, all this the excellent **Svayambhu** [bestowed upon] the noble (*scions*) of the **Chaḷuki** lineage.[1]

(Verse 5.) An ornament of the blest **Chaḷukya** lineage, a *jagadaḷa* against hostile kings, an embellishment of the whole earth, incomparable in majesty, is king **Permāḍi** . . .

(Verse 6.) Like the ocean perfectly protecting numbers of families of *kubhṛit* [kings, or mountains] who came to him for refuge, king **Tailapa** ruled the earth, then king **Satyāśraya**, [then] the blest king **Vikrama** most lofty in dignity, a frontal decoration of the lady [the . . . **Chaḷukya**] lineage.

(Verse 7.) Swiftly (?) . . . by his boldness having driven to flight the **Chōḷa**, by his strokes the incomparable king **Vikramāditya** overwhelmingly crushed the **Nēpāḷa** monarch, burned the **Gūrjara** sovereign's brilliant city [so that it was . . . .] lustreless (?) smoke, in indignation tore up and flung away the roots of banded sovereigns.

(Lines 10-12.) While the [victorious] reign of . . . [2] king **Tribhuvanamalla** was advancing in a course of successively increasing prosperity, (*to endure*) as long as moon, sun, and stars:—One who finds sustenance at his lotus-feet—

(Verse 8.) [Ruler of the city (?) of] **Banavāsī**, devoted to the worship of the universally adored lotus-feet of Madhukēśa the lord of the faultless city of **Jayantī**, eager for mighty battle, is **Taila**.

(Verse 9.) His father was king **Śānta**, skilled in shattering . . .; his mother forsooth was the latter's chief queen **Śriyā-dēvi**, perfect in righteousness; the group of princes consisting of king **Taila**, **Māvuli**, **Chōki**, and **Bikki** are rich in fame: what righteousness is that of the blest prince **Taila**, who has worthy uncles and father![3]

(Verse 10.) Reigning undisturbedly like Bali over his country, being known as a true hero, one who is stained with the red hue of the bright minium lying thick upon the temples of the elephants of the sky-quarters, mighty of splendour, the **Kādamba lion** who shatters proud foes has made the circle of earth free from obstruction, so that many praise him.

(Lines 17-24.) Hail! the Mahā-Maṇḍaḷēśvara who has obtained the five great musical sounds, who has all the titles of honour such as "lord of **Banavāsī best of cities**; receiving the grace of boons from the god Madhukēśvara of Jayantī; naturally scented with musk; ornament of the race of the **Kādamba emperor** the great king **Mayūravarman**, which is sprung from the Three-eyed [Śiva] and Earth, presides over eighty-four towns, is consecrated in the consecratory rites of eighteen world-renowned horse-sacrifices to the (*God of the*) Frontal Eye [Śiva] and the Four-armed [Vishṇu], binds its furious elephants to great crystal pillars crowning the massive peaks of the lord of mountains Himavat, and is delightful in its great majesty; he who is attended by the noise of *permaṭṭi* drums and

[1] [It looks as if the verse meant to say that Svayambhu with Nandi *etc.* might confer blessing on the Chaluki lineage.—H. K. S.]

[2] Supply the usual Chāḷukya formula, as above, inscr. A., l. 2 ff.

[3] [*Kanīya-janakar* is 'uncles,' not 'uncles and father.'—H. K. S.]

(*other*) musical instruments; brilliant with a banner (*having the device*) of a great ape; having as crest a lion lofty in pride; bestowing gold on the needy; causing victory in strife; ornament of the Kadambas; man of might against adversaries," the Mahā-Maṇḍaḷēśvara Tailahadēvarasa, while royally controlling with the internal authority of the *tribhōga*[1] the Five-hundred of Pānuṅgallu so as to suppress the wicked and protect the superior, being in the enjoyment of pleasant conversations at the standing camp of Pānuṅgallu :—

(Verse 11.) To speak of all the hillocks, the crowd of temples, all the lines of valleys, the lotus-pools in the waters filling the multitude of brilliant ponds, likewise all the earth adorned therewith, the bright parks of sandal-trees—verily the aspect of Purikara town is a charming sight for the world.[2]

(Line 26.) There, moreover :—

(Verse 12.) In the joyous offering of consecrated rice-grains one after another a *koḷaga*[3] is filled up[4]; hence I know not how to celebrate (*fittingly*) the magnitude of the famous eminence of the Phallus of Śiva.

(Verse 13.) The Self-born assumed a unique natural form made without turning of the lathe, without graving, without separation, without craftsmanship; Sōma of the South there condescended to burst forth out of the ground.

(Lines 28-29.) The Prior of the establishment of the god Mahā-svayambhu-Sōmanātha, who has thus been described :—

(Verse 14.) There flourished a seat of pious observances, a tree of desire to the lineage of all great ascetics, a servant in Daśavarman's court (?)[5], the cleric Mahēndrasōma Paṇḍita-dēva.

(Lines 30-38.) So Mahēndrasōma Paṇḍita-dēva, most reverend in devotion to calmness, self-control, the major and the minor disciplines, having taken unguents of saffron and bland sandal and fragrant scents prepared for [that decorated.—H. K. S.] the worship of the divinely blest feet of the most noble god Sōmanatha, and likewise rice-grains left over from his sacred meal [grace.—H. K. S.], went to Pānuṅgallu and pronounced a blessing upon the Mahā-Maṇḍaḷēśvara king Tailaha, who, realising with extreme joy the singular qualities of both the establishment and the deity, said "Let us give to the god Sōmanātha for his personal enjoyment a town in our province," and having thus reflected, in concert with the treasurers, ministers, and generals, on a holy lunar day on which Sunday, the 13th of the bright fortnight of Pushya in the cyclic year Sarvajit, the 32nd of the Chāḷukya-Vikrama era, occurred together with the *uttarāyaṇa-saṁkrānti* and a *vyatīpāta*, laved the feet of Mahēndrasōma Paṇḍita and with pouring of water granted as an imperial gift, together with a copper-plate charter, the town Kallavaṇa in the Kundavura Thirty, a county of the Five-hundred of Pānuṅgallu, for the personal enjoyment of the god Sōmanātha, in perpetuity for as long as moon and sun endure, on *sarva-namasya* tenure with immunity from all conflicting claims.

(Verse 15 : a common Sanskrit formula.)

(Verse 16 : a similar Kanarese stanza.)

(Line 40.) For them that preserve (*this foundation*), fruit of endless merit.

---

[1] See *Ind. Ant.*, Vol. XIX, p. 271.

[2] ["All hills are abodes of gods, all valleys are lotus-tanks and ponds and all the earth is one bright park of sandal trees."—H. K. S.]

[3] A measure of capacity, the Sanskrit *āḍhaka*, equal to 4 *baḷḷas*.

[4] ["One consecrated grain of rice offered with joy, grew into a *koḷaga*." This seems to be the famous eminence of the Phallus which the poet wants to describe.—H. K. S.]

[5] [Probably *Daśavarma-vraja* is an order of ascetics.—H. K. S.]

(Verse 17.) There has become eminent a brilliant sun bringing to bloom the lotuses of the fair **Chaḷukya** lineage, a lord of the whole circle of earth, king **Irmaḍi-Padirmaḍi-Nūrmaḍi-Taila**,[1] on whose broad breast appears the lady Fortune, on whose arm (*appears*) the noble lady Victory, to whom the lady Earth is an amorous leman.

(Lines 42-45.) While the victorious reign of . . .[2] king **Trailōkyamalla** was advancing in a course of successively increasing prosperity, (*to endure*) as long as moon, sun, and star :—One who finds sustenance at his lotus-feet—

(Verse 18.) **Māvuli-Taila**, the Viceroy beloved of Earth, whose origin derives from the **Kādamba** race, (*and*) to whom arises grace of boons from the god Madhukēśvara of **Jayantī**,

(Verse 19.) thinking of (*his*) possession, to wit the standing camp of **Nareyaṅgal**, (*his*) subjects, the band of (*his*) friends, the elders, the senior treasurers, the excellent ministers, has been solicitous to strengthen (*them*).

(Verse 20.) Standing in the line of succession and holding the royal rank, devoted to righteousness, king **Taila** has sought for unending bliss in the next world—oh, what a design!—and become a vessel of holiness.[3]

(Lines 48-49.) So after having for several years adorned the fortunes of that realm, the **Kādamba** lion king **Tailaha**, being in the glory of the festival of visitation of the god Sōmanātha :—

(Verse 21.) The lady Victory, accomplishing the vow of the sword-edge,[4] and the goddess of Speech, surpassing the point of an arrow,[5] have come and displayed themselves (*respectively*) upon the arm and in the mouth of king **Vīra-Pāṇḍya**.

(Lines 50-51.) While this Mahā-Maṇḍaḷēśvara was royally administering the seigniory of the **Puligere** county :—

(Verse 22.) The General **Mahādēvarasa**, most irresistible in valour, was administering the land of **Purikara** and the land of most beauteous **Banavāse** in perpetual superior control.

(Lines 52-53.) Under the command of this august General, the General **Biddarasa** and the noble High Minister **Attirāja** were administering the county of **Puligere**. As regards their dignity—

(Verse 23.) In (*his*) greatness in speaking not two (*things*),[6] in turning not his back on the field of battle, (*and*) in holding not amorous sport with others' wives, when one considers, who is equal to the General **Biddarāja**?

(Verse 24.) As he is known as a Vāchaspati [Brahman] of sweet speech, a possessor of moon-bright glory, an ocean of policy according to the famous six qualities,[7] are there others equal (*to thee*), senior General **Attiparāja**?

(Lines 56-64.) The Mahā-Maṇḍaḷēśvara king **Māvuli-Tailaha**, having come to the capital town **Puligere** in order to spend the festival of visitation of the god Sōmanātha, purified his body in the stream of the high-flashing Celestial River consisting of the rays from the god Sōma's toe-nails, and gave a thousand aspersions with streams of milk and water; and, renew-

[1] Literally, "twice, twelve times, a hundred times a Taila."

[2] Supply the usual Chāḷukya formula, as above.

[3] [The words *santāna* and *mantana* (for *mantana* ?) seem to be used here in the sense of 'progeny' and 'honorable race.'—Ed.]

[4] See *Ind. Ant.*, Vol. XVII, p. 322. The sense is that victory is obtained under extreme difficulties.

[5] Namely in keenness and swiftness. [A probable reference to the poet Bāṇa and his works is intended.—Ed.]

[6] This is a variation of the common epithet *ēka-vākya*, "uniform in speech."

[7] *Shāḍguṇya*, the six modes of conduct of a military commander, viz. *sandhi* (peace), *vigraha* (war), *yāna* (travel), *āsana* (resting), *dvaidhībhāva* (causing separation of enemies), and *saṁśraya* (making alliance).

ing the gift of the sacred usufruct of Kallavaṇa previously granted to the god by his grandfather king **Tailaha the elder**, he, while staying in the standing camp of **Nareyaṅgallu** in company with the sheriff and *gāvuṇḍus* of the **Five-hundred of Pānuṅgallu**, the treasurers, the ministers, and the generals, laved the feet of **Jñānasōma Paṇḍita-dēva**, the prior of the local establishment, and with pouring of water, on a holy lunar day on which **Monday**, the **8th** of the bright fortnight of **Pushya** in the cyclic year **Āṅgira**, the **3rd** of the **Chāḷukya king Traiḷōkyamalla's** (*regnal*) **years**, occurred together with the *uttarāyaṇa-saṁkrānti* and a *vyatīpāta*, granted for the personal enjoyment of the god Svayambhu-Sōmanātha of the South the same village, including the superior control and seigniorial rights over Kallavaṇa, benevolences, prescriptive fees of office, gifts, and petty dues, with right to all prescriptive fees, according to the precedent of the previous gift, on *sarva-namasya* tenure with freedom from all conflicting claims.

(Lines 64-66.) On **Monday**, the last day of **Chaitra** in the cyclic year **Śrīmukha**, the **4th** of the **Chāḷukya Traiḷōkyamalla's** (*regnal*) **years**, Ḍākarasa, General (*in charge*) of the **Five-hundred of Hānuṅgallu**, and the treasurers granted for the regular perpetual lamps of the god Sōmanātha one *paṇa* from each of the villages and hamlets of the **Five-hundred of Hānuṅgallu**.

(Verse 25.) The (*god*) worshipped by him is Sōma the Lord of Gods, sovereign of the triple world, praised by sages [*or*, celestials]; his good father is **Mahēndrasōma**; his mother is **Māḷiyakka**, renowned for her conduct, adorned by refinement: how fortunate is this **Jñānasōma**, a full moon (*sōma*) to the ocean of all virtues, a . . . ample brilliant moon to the lotuses the lineage of holy men.

(Verse 26: a common Sanskrit formula.)

(Verse 27.) **Chāva**, the eldest son of the world-famed skilled engraver **Jinnōja**, a perfect Jain, (*and*) **Rājōja**, a god of the cunning,—these have become renowned on earth.

(Line 70.) The engraving of **Rājōja**.

C.—OF THE REIGN OF JAGADEKAMALLA II: THE 10TH YEAR.

This is on a slab with a rounded top containing sculptures, namely a *liṅga* on a stand in the centre, with a squatting bull to the proper right and a cow suckling a calf to the proper left; apparently there is a scimitar over the latter, and on the top are the sun (on proper right) and moon (on left). The inscribed area below this pediment consists of three parts. The first (containing lines 1-2 of text) is about 1 ft. 7¾ in. wide and 2 in. high; the second (lines 3-17) is about 1 ft. 10 in. wide and 1 ft. 3 in. high; the third (lines 18 to end) is of about the same width and 3 ft. 11 in. high.—The character is a very good Kanarese of the period. The average height of the letters in the first half of the inscription is about ½ in.; after this they begin to decrease, and towards the end average only about $\frac{5}{16}$ in.—The language is Old Kanarese, with formal Sanskrit verses (Nos. 1, 32) and a Sanskrit phrase (ll. 60-61). It is not certain whether the *avagraha* denotes, as in pure Sanskrit, a completely vowelless consonant, or whether the vowel *u* was inserted there; the spelling of °*dyad-yaśō-rjjitan* in l. 20, where the second *d* is written with *avagraha* and is followed by *ya*, suggests that the *d* represents *du*.[1] The *upadhmānīya* is used in *Bṛihaḥpati* (l. 56). The archaic *l* appears as *r* in *negardaṁ* (l. 4); elsewhere it has become *ḷ*. The treatment of initial *p* in Kanarese words is inconsistent: in verse it usually remains, yet we find *hore* (l. 13), *hiṁgidud=* (l. 13), *hāl* (l. 48), *hoṁ* (l. 48), and in prose we have *pannir°* (l. 26), *Puligere* (ll. 50, 64), *paḍedu* (ll. 52, 55), beside *hattar=* (l. 52), *hola°* (ll. 53, 58, 60), *hāḷa* (ll. 58-9), *horeya* (l. 59), and *haḷḷa°* (l. 59). The archaic ending of *āvoṁ* (l. 37) is noteworthy. As lexically interesting we may notice *staṁbēra* (l. 20), apparently formed *metri gratia* as a variant of the regular *staṁbērama* by the analogy of °*ga*

[1] On this point see my remarks on the Mādagihāḷ inscription, above, Vol. XV, p. 318.

beside °*gama*; *hēriga* (l. 21), a form throwing some light upon the meaning of the official title *hēri-sandhi-vigrahi*, which hence would seem to mean a minister in charge of the secret intelligence-department of foreign policy (cf. Kittel, s.v. *hēriga*); and *kaṇḍarane*, "carving" (l. 64).

The record, after invocation of Śiva, begins with a short metrical genealogy of the Western Chāḷukyas from Tailapa (i.e. Taila II) to the reigning sovereign, Jagadēkamalla [II], whom it duly glorifies (ll. 2-15). It then refers itself in formal prose to the latter's reign (ll. 15-17), and devotes four stanzas (ll. 18-24) to the laudation of his minister Kēsirāja, also called Kēśavadēva, Kēsimayya and Jayakēsidē-varasa in l. 51, a distinguished general who had defeated the Chōḷas, Lāḷas, and Gūrjaras, and who was also a minister of foreign affairs, an officer of the treasury, and an administrator of the royal seraglio; we next learn from the prose of ll. 24-27 that he was at this time administering the Beḷvala Three-hundred, the Huligere Three-hundred, the Halasige Twelve-thousand, and the Hānungallu Five-hundred.[1] A series of 10 verses (ll. 27-39) then introduces us to the following pedigree of generals:—

Āditya-Bhaṭṭa Mēḷamayya
| |
Drōṇāchārya, *m.* Chāmala-dēvi
|
Āchirāja or Ācharasa | Mēcha, Mēchi, Mēcharasa, Mēchirāja or Mēchaṇa[2] *m.* Veṇṇala-dēvi and Laḷiya-dēvi | Kañchi

Four further verses (ll. 39-44) bring us to the province of Purikara (i.e. Puligere or Huligere), now being ruled by a certain Jayakēśi-dēva, of the Maṇala[2] family, and its capital, of the same name, with its sanctuary of Mahā-Svayambhu-Sōmanātha, of which the prior (*āchārya*) was Jñānasōma Paṇḍita-dēva, the son of Mahēndrasōma,[3] the son of Dēvasōma. After a verse in praise of "Kēśava the minister of king Sōmēsvara," who must be the previously mentioned general Kēsimayya, and Jagadēkamalla's father Bhūlōkamalla-Sōmēśvara III (ll. 44-45), and another in honour of Jñānasōma (ll. 45-47), we learn from two stanzas (ll. 47-49) that Mēcharasa set up a golden finial (*kalaśa*) upon this temple, and gave for this purpose 100 *mattar* of land in Kunduravaḷḷi. The details and date of this gift, for which Jñānasōma was trustee, are then specified in prose (ll. 49-61), and another verse adds some further details (ll. 61-62). The words *Karṇāṭa-sukavi-mukhya-paṇḍitara* (l. 64), which I have translated as "of an eminent scholar among Kanarese master-poets" may equally be taken as a proper name, the *nom de plume* of the author of the inscription. The engraver was Chāvōja, son of Jinnōja of Puligere (*ib.*), on whom see above, inscription B., l. 70.

The date is given on ll. 56-57 as the 10th year of the reign of Jagadēkamalla, the cyclic year Prabhava; Āshāḍha śuddha 12; Thursday; the *dakshiṇāyana-saṁkrānti*; a *vyatīpāta*. This is irregular. The given *tithi* corresponded actually to Thursday, 12 June, A.D. 1147, on which it ended 17 h. after mean sunrise (for Ujjain). But the *dakshiṇāyana-saṁkrānti*, or Karka-*saṁkrānti*, took place, according to the *Ārya-siddhānta*, exactly a fortnight later, on Thursday, 26 June, 15 h. 51 m. after mean sunrise; and Mr. R. Sewell has pointed out to me that by the *Siddhānta-śirōmaṇi*, and probably by the *Brahma-siddhānta* also, it was due on Wednesday, 25 June, about 14 h. after mean sunrise.

The geographical names mentioned are: the Beḷuvala Three-hundred (ll. 25-6); the Huligere Three-hundred (l. 26), or Puligere *nāḍ* (l. 50), sanskritised as Purikara (l. 39); the town of Huligere (l. 53), or Puligere (l. 64), or Purikara (ll. 40, 45 f.); the Halasige

[1] See *Dyn. Kanar. Distr.*, p. 458.

[2] This is the same as the Maṇalēra family, on which see above, Vol. VI, p. 52, and *Mysore Archæol. Report*, 1908-9, p. 16. An ancestor of this official, also named Jayakēśi, figures in a Hulgūr inscription of Śaka 960.

[3] See above, inscriptions A. and B.

Twelve-thousand (l. 26); the Hānuṅgallu Five-hundred (l. 26); Kuntaḷa (l. 39); Ekkalavāḍa (l. 49); Kunḍuravaḷḷi (ll. 49, 51-53); Iṭṭage (ll. 53, 58 f.); Niṭṭūr (ll. 53, 60); Kāntarike (l. 59); Benakana koḷa, "Benaka's Lake" (l. 60); the *tīrthas* (l. 63); and various nations (ll. 7, 18, 22-3). Beḷuvaḷa (Beḷvala) and Huligere are well known; and Huligere town is the modern Lakshmēshwar. Halasige is Halsī. Hānuṅgallu is the modern Hāngal. Ekkalavāḍa is the name of the district in which lay Kunduravaḷḷi; and the latter may be identified with the village styled "Kunderhalli" in the *Postal Directory*, "Koondurwullee" on the Indian Atlas, sheet 41, and "Kudravli" on the Bombay Survey, sheet 334, which lies in lat. 15° 8′, long. 75° 36′, about 5½ miles ENE. from Lakshmēshwar. Niṭṭūr ("Nectoor" on the Indian Atlas) lies in lat. 15° 9¼′, long. 75° 34½′.

TEXT.[1]

[Metres: vv. 1, 32, *Anushṭubh*; vv. 2, 3, *Śārdūlavikrīḍita*; vv. 4, 6, 7, 9, 11, 13-20, 22-7, 29, 30, 33, *Kanda*; vv. 5, 28, *Mahāśragdharā*; vv. 8, 31, *Champakamālā*; vv. 10, 12, 21, *Mattēbhavikrīḍita*.]

1 Śrī Namas=tuṁga-śiraś-chuṁbi-chaṁdra-chāmara-chāravē ‖ [1*] traiḷōkya-nagar-āraṁbha-mūla-staṁ-

2 bhāya Śaṁbhavē ‖ [1*] Śrīmach-chāru-Chaḷukya-vaṁśa-naḷinī-bāḷ-ātapaṁ dur-vvinīt-ā-

3 mēy-āri-nṛipāḷa-bāḷa-kadaḷī-shaṇḍ-ōgra - vēdaṇḍan = uddām-ā-namra-narēṁdra-mauḷi-maṇi-saṁghṛishṭ-āṁghṛi(ghri)-

4 padma-dvayaṁ bhūm-īśaṁ negardaṁ samagra-vijaya-śrī-lōlupaṁ **Tailapaṁ** ‖ [2*] **Chāḷuky-ābharaṇaṁ** tadīya-

5 tane(na)yaṁ **Satyāśrayaṁ** tadh-dharāpāḷ-ātm-ānuja-sūnu **Vikrama-nṛipaṁ** saṁd=**Ayyaṇaṁ** kīrtti-lakshmī-lōlaṁ **Ja-**

6 **yasiṁhan=ā** nṛipa-suta[ṁ*] saṁgrāma-jit sārvvabhaum-āḷaṁb-**Āhavamallan=ā** nṛipa-sutaṁ **Sōmēśvar-ōrvvī-**

7 **śvaraṁ** ‖ [3*] Ka ‖ Ā nṛipatiya tammaṁ **Chōḷ-ā**nana-kānana-dav-ānaḷaṁ **Gūrjjara-bhūp-Ānūpa-khadira-khaṇḍanan=ī** nelanaṁ

8 taḷedan=adaṭa **Permmāḍi-nṛipa** ‖ [4*] Vṛi ‖ Chaḷa-chīrī-bhēriyiṁ kīchaka-kuḷa-viḷasad-gāyak-ānikadiṁ bhūtaḷa-bhūbhṛit-pīṭha-

9 diṁ pannaga-phaṇa-maṇi-dīpaṁgaḷiṁ śarmma[2]-nirmmōka-lasad[3]-vastraṁgaḷiṁ bēṛ-a-varge vibhavamaṁ māḍi vidvishṭaraṁ dōr-vvaḷa-dṛiptaṁ Bhi-

10 lla-pallī-sthitiyoḷ=irisidaṁ **Vikramāditya-dēva** ‖ [5*] Ka ‖ Ā dharaṇīśana putraṁ sādhita-dik-chakran=amṛitakara-kiraṇa-ya-

11 śō-dīdhitiy=esedaṁ mahim-āgādhaṁ **Bhūlōkamallan=uddhata-malla** ‖ [6*] Tad-apatyaṁ ripu-bhūpa-pradīpa-jhaṁ-

12 jhā-samīraṇaṁ ripu-rāy-ōnmada-kari-kaṇṭhīravan=ennadar=ār=**Jjagadēkamalla-chakrē-śvarana** ‖ [7*] Vṛi ‖ Kamaṭha-kaṭhōra-

13 karpparada tāpam=aḍaṁgitu Nāga-rājan=uttama-maṇi-mastakakke hoṛe hiṁgidud=ā dig-ibhakke kaṇṭha-bhā-

14 ram=ad=uḍugitt=enal*u* vasumatī-taḷamaṁ **Jagadēkamallan=asra(śra)madoḷe** tāḷdidaṁ nija-bhuja-draḍhima-pra-

15 baḷa-prōdēśadoḷ ‖ [8*] Svasti samasta-bhuvan-āśraya Śrī-Pṛithvī-vallabha mahā-rājādhirāja paramēśvara

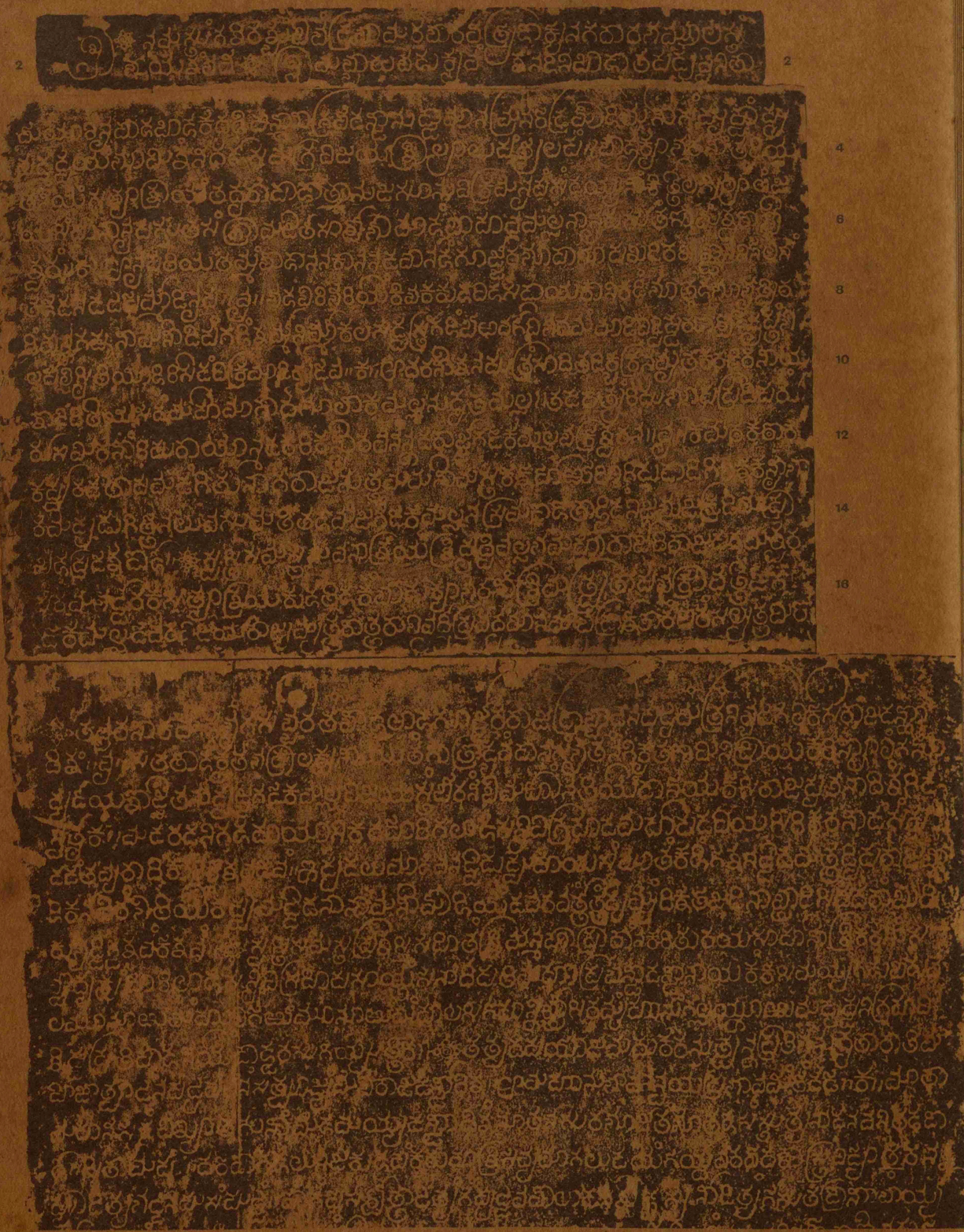
16 paramabhaṭṭāraka **Satyāśraya-kuḷa-tiḷakaṁ Chāḷuky-ābharaṇaṁ** śrīmat-pratāpa-chakra-vartti **Jāga-**

[1] From the ink-impression.

[2] Apparently an error for *sarppa-*.

[3] Irregular *pṛāsa* of *ḷa* and *la*.

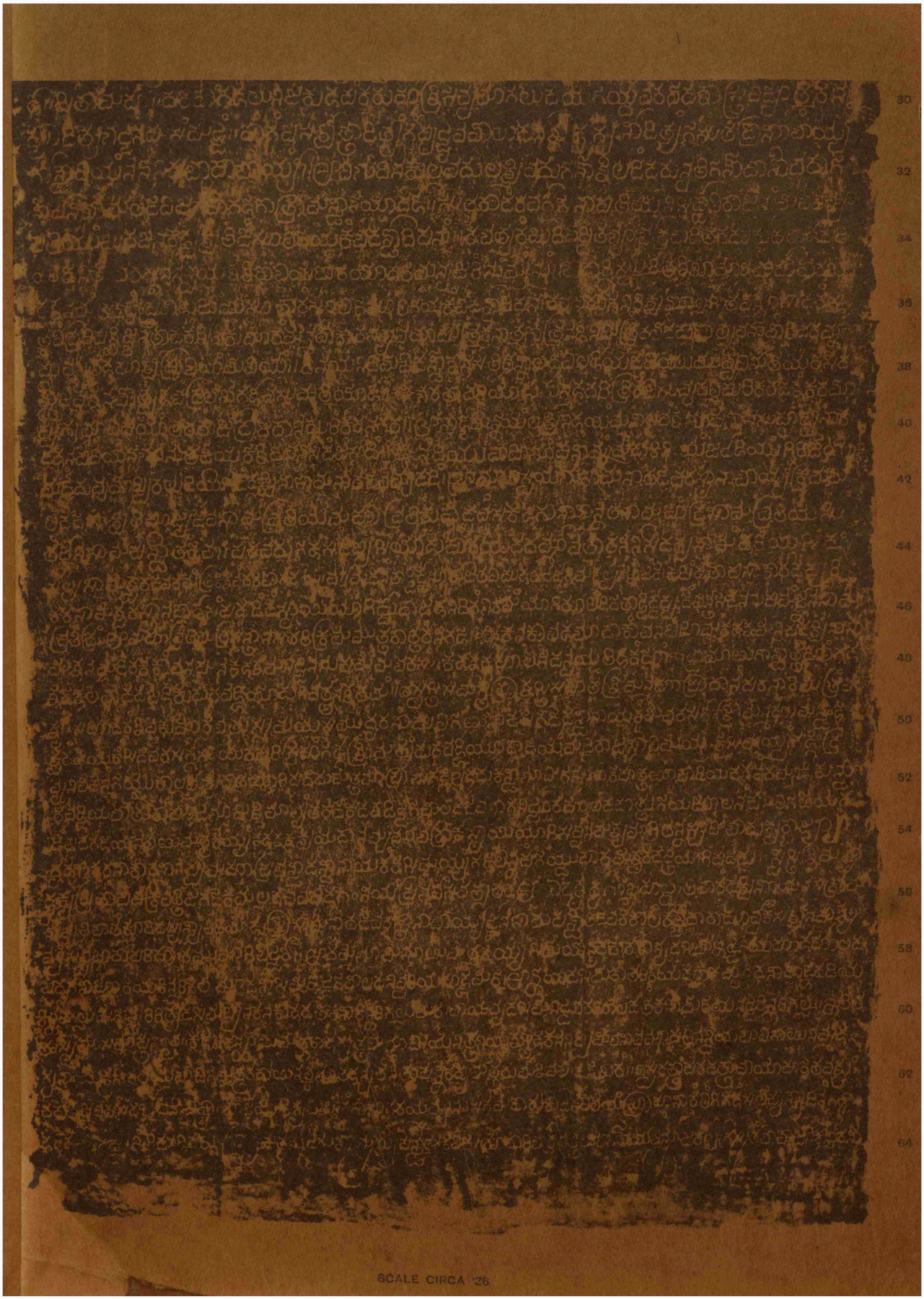
Lakshmeshwar Inscription of the reign of Jagadekamella II: the 10th year.



F. W. THOMAS

SCALE CIRCA 2/3

WHITTINGHAM & GRIGGS, COLL.



SCALE CIRCA '26

17 dēkamalla-dēvara vijaya-rājyam=uttarōttar-ābhivṛirdhdhi(ddhi)-pravardhdhamānam=ā
chamdr-ārkka-tāram baram saluttam-ire [|*]
18 Tach-charaṇa-kamaḷa-bhṛimgam sach-charitam **Chōḷa Lāḷa-Gūrjjara-rājēmdr-ōchchā-**
ṭana-paṭu-mamtram nichchaṭa-gali **Kēsirāja-daṇḍā-**
19 dhīśam || [9*] Vṛi || Satat-āḷamkṛita-bhadra-lakshaṇa-yutam gōtr-ōdbhavam
dāna-sambhṛitan=amgīkṛita-gōminī-priya-kariṇy-ālimgan-ō-
20 dyad-yaśō-rjjitan=udyaj-Jagadēkamalla-vijaya-stambēran=emb=ī mah-ōmnatiyimd=**Āneya**
Kēsirāja-pṛitaṇ-ādhīśamg=id=a-
21 nvartthakam || [10*] Mada-radanig-ḷa hay-ānīkada hēriga-Lāḷa-sandhi-vigrahada
mahā-padaviya siri-karaṇada sampa-
22 dad=amtavar-ādhikāri **Kēśavadēvam** || [11*] Idu dalu **Māḷavan**=aṭṭid=udgha-bāya-
samghātam **Kaḷimg**-ēśan=aṭṭida matta-dvipa-rāji **Chō-**
23 ḷikan=adhīram bhītiyim kappam=aṭṭida nānā-maṇi-mauḷiy=emd=avar-avar=tem-
(tta)rttamdu mumd=ikke tōjadin=āchchhādisidam dhar-āmbudhi-
24 kubhṛid-dig-dēśavam **Kēśavam** || [12*] Svasti samasta-praśasti-sahitam śrīman-
mahāpradhāmna[1] kari-turaya-sāhaṇi śrīkaraṇam sa-
25 rvv-ādhyaksham hēri-Lāḷa-sandhi-vigrahi pasāytam sēnādhipati mahā-prachamḍa-
daṇḍanāyakam **Kēsimayyamgaḷu Beḷuva-**
26 **la mānūruman Huligere-mānūruman Halasige-pannī(nni)rchchāsiramum Hā-**
numgall=aynūrumam dushṭa-nigraha-vi-
27 śishṭa-pratipālaneyimd=aḷid=arasu-geyyutt-ire || Tat-pada-payōja-madhukaran=utpanna-
pratibhan=udhdhat-ārāti-ma-
28 hīj-ōtpāṭana-paṭu-pavanam sat-pūjyam **Mēchirāja-daṇḍādhīśa** || [13*] Ā mah-
ānubhāvan=anvaya-prabhāvam-emt=emdade || Ka || Mātā-
29 mahan=esedam vikhyāta-guṇam **Mēḷamayya-daṇḍādhīśam** nūtana-sura-bhūjūtam
bhūtala-samstutyan=ādan=avanītaḷado-
30 ḷ || [14*] Pitāmahaṁ[2] || Dhare pogaḷalu nija-kuḷa-paṁkaruha[ṁ*] Śrī-sēvyam=
āgal=udayam-geydam vara-vēda-śāstra-vidy-ōtkaran=a-
31 pp=**Āditya**[3]-**bhaṭṭan**=agha-samghaṭṭam || [15*] Pomgam pesar-vve(ve)tt=ādityamgam
puṭṭuva vol=ādan=akhila-guṇ-**Ādityamge** sutam **Drōṇāchāryyam**
32 Gāṇḍiviy-amnan=enipa chāp-āchāryyam || [16*] Ā vibhuvina kula-vadhu Laksh-
mī-vadhug=eṇe śīladimd=Arundhatig=eṇe Vāṇī-vadhug=e-
33 ṇe ene[1] **Chāmala-dēvi** jagam pogaḷe gōtra-maṇḍaney=ādaḷ || [17*] Sutar=ādar=
avarge sēnāpatiy=enis-irdd=**Āchirājanum Mēcha-chamū-**
34 patiyum budha-jana-kalpa-kshitijam **Sūligeya Kamcha-daṇḍādhipanum** || [18*] Ī
chatur-ambudhi-vēshṭita-bhū-chakradol=itara-purusharoḷ paḍi-
35 y-iḍe nimt=**Ācharasanan**=anvaya-śaśi-rōchiya dorey=oḷare manujar=imnum mum-
num || [19*] Kāḷ-āgni-sphurita-śikhā-māḷe mahā-Rāhu-
36 raśa(sa)nam=Amtaka-damshṭram kāl āhiya sū(phū)tkāram sūlige[4] **Sūligeya Kamchi-**
daṇḍādhipaṇa || [20*] Dhavaḷ-āpāmga-nirīkshan-ōllasita-vēśyā-sōdaram sa-
37 t-kavīmdra-vipaśchij-janat-ādaram Śiva-kumāram Manmath-ākāran=anya-vadhū-putra-
kan=ātma-gōtra-naḷinī-mitram dal=emdamdu pōlvavan=āvam Śiva-dharmna(rmma)-
38 harmya-tala-pūrvva-prāchiyam **Mēchiyam** || [21*] [5]Vinaya-nidhi **Mēchi-**
daṇḍēśana sati **Venṇala-dēvi Laḷiya-dēviyum**=urvvī-vinuteyar=eseda-
39 r=nnija-vamśa-nav-ōtpaḷa-chamdra-lēkhegaḷ vasumatiyoḷ || [22*] Bharat-āvaniyoḷu
Kuntaḷa-dharitri ramjisuvud=alli **Purikara-dēśam** karam=o-

[1] Read *-pradhānam*.
[2] The engraver has almost written *ppau* for *ppā*.
[3] Read *eney=ene*.
[4] Again *prāsa* of *ḷa* and *la*.
[5] The second *pāda* of this verse is metrically wrong, having two *morae* in excess.

40 ppugum=ā vishay-āṁtara-rājad-rājadhāni **Purikara-**nagara || [23*] Ā nālke
manneyaṁ Lakshmī-niḷayaṁ **Maṇala-**vaṁśa-bhūshaṇan=asuhṛid(n)-Maināka-
41 daḷana-paviy=ene bhū-nuta-**Jayakēśidēvan**=esedaṁ jasadhi(di)ṁ || [24*] Naṁ-
diyum=ahi-bhūshaṇamuṁ Maṁdākiniyuṁ jaṭ-āḷiyuṁ Girijeyu-
42 m=ardhdh-ēṁduvum=opp-iral=udi(da)yisidaṁ **Dakshiṇa-Sōmanātha-dēvaṁ** mudadiṁ
|| [25*] Ā **Mahā-Svayaṁbhu-Sōmanātha-dēvara** sthān-āchāryya-kramam=eṁ-
43 t=eṁdaḍe || Kshiti-pūjya-**Dēvasōma-**vratiya mahā-vrati-kuḷ-ōdbhavaṁ sakaḷa-
guṇ-ōnnatan=ā **Mahēṁdrasōma-**vratiya su-
44 taṁ **Jñānasōma-paṇḍita-dēva** || [26*] Para-vadhug=eḷasada pusiyoḷu poreyada
dharmm-āvatāran=enisida guṇamaṁ dhariyisidaṁ
45 sale **Sōmēśvara-dēvara** maṁtri **Kēśavaṁ** dhare pogalalu || [27*] Vṛi ||
Madanaṁ tāḷd-irddanō rājita-vipuḷa-jaṭā-jāḷamaṁ kalpa-bhūjaṁ padepiṁdaṁ
tāpas-ākārade Puri-
46 kara-Sōmēśvara-sthānadoḷ saṁpadadiṁdaṁ sthāyiy=āg-irddudo jaḷanidhi gaṁbhī-
ramaṁ yōgi-rūpiṁd=ide tāḷd-irddappud=eṁbant=esedan=anupamaṁ **Jñānasōma-**
47 vratīṁdraṁ || [28*] Ā mahā-vrati-putra-santāna-saṁtati-kramam=uttarōttaraṁ
negaḷe || Kanak-āchaḷa-chūḍā-kāṁchana-baṁhima-kaḷaśam=enipa **Dakshiṇa-Sō-**
48 mēśana maṁdirakke kāṁchana-ghana-kaḷaśaman=iṭṭan=anupamaṁ **Mēcharasaṁ** ||
[29*] Kaḷaśada-hāl (ḷ)=aned[1]=anvaya-tiḷakaṁ hoṁ-goṭṭu māṛu-goṇḍ=ittaṁ hoṁ-
gaḷa-
49 śa(sa)kk=**Ekkalavāda(ḍa)da** baḷi **Kuṁduravaḷḷiyoḷu** nivarttana-śatamaṁ || [30*]
Svasti samasta-praśasti-sahitaṁ śrīman-mahāpradhānaṁ para-nārī-putraṁ vē-
50. śyā-sahōdaraṁ Śiva-kumāraṁ chatus-samaya-samudhdharaṇaṁ **Puligere-**nāḍa per-
ggaḍe daṇḍanāyakaṁ **Mēcharasar** | śrīman-mahāmaṇḍaḷē-
51 śvaraṁ **Jayakēsi-dēvarasargge** sâyira-parigrahaṁgalgaṁ śrīmat-**Kuṁduravaḷḷiy**=ūr-
oḍeyaṁ **Maddirāja Sōvimayya Kēsimayyaṁgaḷgaṁ** dra-
52 vya-nivēdanaṁ geydu kāl-garchchu-kai-dhārey=āgi paḍedu mattam=ā prabhugaḷge
aḷadu kaṇḍa-bhūmige nūṛakke hattar=ōpādiya daśavaṁdhaman=ikki **Kundu-**
53 **ravaḷḷiya** châtur-āghāṭa-bhūmi-śī(sī)m-ābhyaṁtarad=ēka-dēśad=lṭṭage-volada dēva-bhōga
Niṭṭūra holada hattugeya holanaṁ **Huligereya** ga-
54 ḍiṁbada gaḷeya nūṛu mattar=kkeyyaṁ kaḷaśakk=akshaya-dānamum=ā-chaṁdr-
ārkka-sthāyiy=āgi sarvva-namaśya(sya)m=āgi tanna svāmi **Chāḷukya-**
rājy-ō-
55 dhdharaṇa-karaṇa-kāraṇan=appa mahā-prachaṇḍa-daṇḍanāyakaṁ **Kēsimayyaṁgaḷge**
binnapam-geydu pāramēśvara-dattiy=āgi paḍedu || Svasti śrīmach-**Chā-**
56 ḷukya-pratāpa-chakravartti **Jagadēkamalla-dēva-varshada 10neya Prabhava-**
saṁvatsarada **Āśāḍa**[2]-śudhdha 12 Bṛihaḥpati-vāraṁ dakshiṇāyana-saṁkrama-
57 ṇa-vyatīpātaṁ kūḍida puṇya-tithiyoḷu śrī-Sōmanātha-dēvara sthān-āchāryya-
Jñānasōma-paṇḍita-dēvara kāḷaṁ karchchi dhārā-pūrvvakaṁ sarvva-namaśya(sya)-
58 muṁ sarvva-bādhā-parihāramum=āgi · biṭṭar || Ā dharmma-bhūmi nūṛu
matta[r*]-kkeyya sīmey=eṁt=[e*]ṁdaḍe | īśānyada sīme Iṭṭageya hāḷa holada
59 badagaṇa horeya kinnari-gal mūḍaṇa sīme Iṭṭage-volada nīr-vvariya haḷḷaṁ
mēre | āgnēyada sīme Kāṁtarikeya hāḷa mūḍaṇa haḷḷa-daḍiya
60 kinnari-gallu mēre nairirityada[3] sīme Benakana koḷada teṁkaṇa kinnari-gallu
mēre | vāyavyada sīme Niṭṭūra holada teṁkaṇa mēreya naṭṭa kinnari-gallu |
iti cha-

[1] Apparently to be emended to *end=*.
[2] Read *Āshāḍha-*.
[3] Read *nairṛityada*.

61 tus-sīmā samāptaḥ Vṛi || Kaḷaśada nūṟu mattar=oḷag=uttama-bhūmiyan=ittan=a yaśas-tiḷakan=enippa **Mēchaṇa-chamūpati Nandiya** bāvig=āṟu nirmmaḷa-

62 guṇa-yukte Gauraleya[1] bāvige mattar=ad=āṟ=enalke bhūtaḷa-nutan=aṁtu panneraḍa mattarumaṁ Śiva-pāda-śēkharaṁ || [31*] Sva-dattāṁ para-dattāṁ vā yō harēta vasu(su)ṁ-

63 dharāṁ [|*] śa(sha)shṭiṁ varsha-sahasrāṇi vishṭhāyāṁ jāyatē kṛimiḥ || [32*] Gaṁgā-sāgara-Yamunā-saṁgamadoḷu kōṭi kavileyaṁ brāhmaṇaraṁ liṁgigaḷaṁ sale puṇya-dinaṁgaḷo-

64 ḷ=aḷidavargaḷ=appar=iṁt=idan=aḷidar || [33*] Śrīmat-Karṇṇāṭa-sukavi-mukhya-paṇḍitara kavite || Rūvāri-chakravartti **Puligereya Jinnōjara** agra-sutaṁ **Chāvōjana** kaṇḍarane

TRANSLATION.

(Verse 1 : identical with v. 1 of inscr. A.)

(Verse 2.) There flourished a morning-sun to the lotus-lake the blest beauteous **Chaḷukya** lineage, a grim elephant to the coppices of young plantains (*consisting of*) countless froward enemy kings, a lord of earth whose pair of lotus-feet was rubbed by the gems of august obeisant monarchs' diadems, an eager wooer of the goddess of universal victory, **Taḷapa.**

(Verse 3.) His son was **Satyāśraya,** embellishment of the **Chāḷukyas.** A son of the latter monarch's younger brother was king **Vikrama,** (*likewise*) the excellent **Ayyaṇa** (*and*) **Jayasiṁha** the wooer of the goddess of glory. The last-named king's son was **Āhavamalla,** victor in battle, mainstay of empire; that king's son was the lord of earth **Sōmēśvara.**

(Verse 4.) That king's younger brother, the valiant king **Permāḍi,** a consuming fire to the forest of the faces of the **Chōḷas,** breaking down the acacias in the marshes of the **Gūrjara** kings, ruled this land.

(Verse 5.) Haughty with his might of arm, king **Vikramāditya** reduced his foes to the condition of a village of Bhillas, giving them severally splendours with drums consisting of skipping crickets, with bands of bright singers consisting of thickets of reeds, with royal stools consisting of the ground, with lamps composed of gems in the hoods of serpents, with gay robes of snakes' sloughs.

(Verse 6.) This sovereign's son **Bhūlōkamalla** became distinguished, acquiring the circle of space, having a radiance of glory like moonbeams, unfathomable of majesty, wrestler against the proud.

(Verse 7.) His son is a storm-blast upon the lamps hostile kings, a lion to the furious elephants hostile princes: who are there that do not thus speak of the Emperor **Jagadēkamalla** ?

(Verse 8.) The pain of the Tortoise's hard carapace has stopped ; the load on the Serpent king's splendidly jewelled head has diminished ; the burden on the neck of the elephants of the sky-quarters has abated : this is because **Jagadēkamalla** bears without labour the realm of earth upon the puissant place of firmness, his own arm.

(Lines 15-17.) While the victorious reign of . . .[2] the majestic Emperor king **Jagadēkamalla** was advancing in a course of successively increasing prosperity, (*to endure*) as long as moon, sun, and stars :—

(Verse 9.) A bee to his lotus-feet, righteous in conduct, having counsels skilful in shattering the **Chōḷa, Lāḷa,** and **Gūrjara** monarchs, a true hero is the General **Kēsirāja.**

(Verse 10.) Having auspicious characteristics [*or*, characteristics of a high-bred elephant] in constant embellishment, born of a noble family [*or*, herd], abundant in bounty [*or*, rut-ichor],

[1] The *au* is rather uncertain.

[2] Supply the usual Chāḷukya formula, as above.

winning high fame through receiving the embraces of the beloved elephant-cow of Lakshmī, he is a bull-elephant of victory for the exalted Jagadēkamalla: through this high distinction the General Kēsirāja of the Elephants has gotten this appropriate name.

(Verse 11.) Kēśavadēva is (*in charge*) of rut-raging elephants, of squadrons of horse, of the high office of (*the ministry of*) peace and war for the secret service (?)[1] and Lāḷas, (*and*) of the treasury, a controller of the prosperous seraglio.

(Verse 12.) "This forsooth is a troop of noble horses sent by the Māḷava"—"(*this is*) a column of fiery elephants sent by the king of Kaḷiṅga"—"(*this is*) a diadem of various gems sent as tribute in terror by the Chōḷikas' monarch"[2]: as each of them with these words brought (*these things*) and laid them down before him, Kēśava overspread with his glory earth, ocean, mountains, and sky.

(Lines 24-27.) Hail! while he who possesses all titles of honour, high minister, master of the stables of elephants and horses, treasurer, general supervisor, minister for peace and war for the secret service (?) and the Lālas, favourite, head of the army, the great august General Kēsimayya, was reigning[3] in government of the Beḷuvala Three-hundred, the Huligere Three-hundred, the Halasige Twelve-thousand, and the Hānuṁgallu Five-hundred so as to suppress the wicked and protect the cultured:—

(Verse 13.) A bee to his lotus-feet, talented, a wind potent to uproot the trees haughty foemen, venerated by the good, is the General Mēchirāja.

(Line 28.) As regards the dignity of this noble man's lineage:—

(Verse 14.) His maternal grandfather was the illustrious General Mēḷamayya, renowned for virtues; he was a modern Celestial Tree on earth, praised throughout the world.

(Line 30.) His paternal grandfather:—

(Verse 15.) Āditya Bhaṭṭa, abounding in the lore of the excellent books of the Vēdas, pulverising sin, rose (*to honour*) amidst the applause of the earth, so as to be served by the goddess of Fortune (*dwelling*) in the lotus of his own race.

(Verse 16.) To Āditya, who had all the virtues, there was a son Drōṇāchārya, a master of the bow known as being like Gāṇḍivi [Arjuna], as if he had been born to Pon[4] and the renowned Sun-god.

(Verse 17.) This noble man's high-born wife Chāmala-dēvi, who was known as a peer of the lady Fortune, a peer of Arundhatī in virtue, a peer of the lady Speech, adorned her race, amidst the praises of the world.

(Verse 18.) Their sons were the General Āchirāja, the General Mēcha, and the General Kañcha of the Spear, a tree of desire to sages.

(Verse 19.) Are there in the present or the past any mortals that are equal to the moonlight to his race, Ācharasa,[5] when he is compared with other men on this circle of earth girdled by the four oceans?

(Verse 20.) The line of glittering crests of the fire of doom, the tongue of great Rāhu, the fangs of the Destroyer, the hiss of the black cobra, is the spear of the General Kañchi of the Spear.

---

[1] See above, p. 44.

[2] [The correction of *adhīraṁ* into *adhīṭaṁ* is unnecessary. *Chōḷika*=the Chōḷa king; and *adhīraṁ* may be translated 'the weak-minded.'—H. K. S.]

[3] For *arasu* applied to civil administration by officers of the Crown see above, *pannāyaman=āḷv-arasugaḷu*, p. 35, note 3.

[4] *Pon* is the Kanarese for *Suvarṇā*, the name of a wife of the Sun-god (Gopinatha Rao, *Elements of Hindu Iconography*, Vol. I, pp 307, 313). [Perhaps *poṅgaṁ* has to be taken as an adjective qualifying *sutaṁ*, in the sense 'a man of elated courage.'—H. K. S.]

[5] There seems to be some irregularity in the text. *Ācharasanan=* must be genitive; but if so, it has a superfluous syllable *na*.

(Verse 21.) As truly he is called a brother to public women bright with the glances from their white eye-corners, one who honours worthy master-poets and sages, a son of Śiva, one with the form of the Love-god, a son to others' wives, a friend to the lotus-pool[1] of his own race, who can equal **Mēchi**, the right eastern face[2] on the floor of the edifice of the religion of Śiva.

(Verse 22.) **Veṇṇala-dēvi** and **Laḷiya-dēvi**, the good wives of that treasure of courtesy the General **Mēchi**, have flourished on earth, renowned in the world, as digits of the moon to the fresh water-lilies of their race.

(Verse 23.) In the realm of Bharata the land of **Kuntaḷa** shews itself in beauty. In it appears forsooth the province of **Purikara**; the capital city radiant within that district is **Purikara** town.

(Verse 24.) The seignior of this county, the world-renowned **Jayakēśidēva**, has become eminent by his glory, being known as a seat of Fortune, an ornament of the **Maṇala** race, a thunderbolt shattering the Maināka his foes.

(Verse 25.) There has arisen amidst joy the god **Sōmanātha** of the South, with whom are seen (*the sacred bull*) Nandi, the ornament of snakes, the Ganges, the high-braided hair, the Mountain's Daughter, and the half-moon.

(Lines 42-43.) As regards the line of priors of the establishment of this god **Mahā-Svayambhu-Sōmanātha** :—

(Verse 26.) Of the world-revered ascetic **Dēvasōma** (*there was a son*) sprung from the family of great ascetics, exalted in all virtues; of this ascetic **Mahēndrasōma** (*there was*) a son, **Jñānasōma-Paṇḍita-dēva**.

(Verse 27.) **Kēśava**, minister of king **Sōmēśvara**, has verily maintained the merit of desiring not others' wives, of abiding not in falsehood, of being known as an incarnation of righteousness, so that the earth praises him.

(Verse 28.) The incomparable **Jñānasōma**, lord of ascetics, has so distinguished himself that men say: "Is it the Love-god who has assumed a brilliant abounding mass of high-braided locks? is it the Tree of Desire that joyfully has settled permanently in happiness at the establishment of Sōmēśvara in Purikara under the guise of an ascetic? is it the Ocean that displays its profundity in the form of a Yōgi?"

(Line 47.) While this continuous sequence of the succession of sons of great ascetics was flourishing :—

(Verse 29.) On the temple of Sōmēśa of the South, which is, as one may say, a massive finial of gold on the crest of the Golden Mountain, the incomparable **Mēcharasa** has set a solid finial of gold.

(Verse 30.) The ornament of his lineage, having purchased for payment of gold a hundred *nivartanas* at **Kunduravaḷḷi**, within (*the district of*) **Ekkalavāḍa**, for (*defraying the expenses of*) the golden finial, presented it under the name **Kaḷaśada-hāḷu**.

(Lines 49-55.) Hail! He who possesses all titles of honour, the high minister, son to others' wives, brother to public women, son of Śiva, restorer of the four churches,[3] controller of the county of **Puligere**, the General **Mēcharasa**, having presented money to the thousand retainers of the Mahā-Maṇḍalēśvara **Jayakēsi-dēvarasa** and to **Maddirāja**, mayor of **Kunduravaḷḷi**, **Sōvimayya**, and **Kēsimayya**, and having (*thereby*) purchased with washing of feet and

[1] A poetic term for the sun.

[2] The word *pūrva-prāchī* is not clear to me. It seems to mean "the east-of-east face," i.e. a person holding a very prominent and representative position, in the church. Most temples face towards the east.

[3] The Śaivas, Vaishṇavas, Jains, and Buddhists.

laving of hands the piece of estate connected with the lands of Iṭṭage and the lands of Niṭṭūr (*held for*) the god's usufruct, forming a part of the area within the boundaries marking the four sides of access of **Kunduravaḷḷi**, which he measured out for these gentlemen and on which he deducted a *daśavandha*[1] at the rate of ten per cent. on *kaṇḍa*[2]-ground, obtained as an imperial gift one hundred *mattar* arable soil by the rood according to the *gaḍimba* of **Huḷigere**, as a perpetual endowment for the finial, to endure as long as moon and sun, on *sarva-namasya* tenure, as the result of a petition made by him to his lord the great august General **Kēsimayya**, the instrument and cause of the uplifting of the **Chāḷukya** kingdom;

(Lines 55-58.) and—hail!—on a holy lunar day on which **Thursday, the 12th** (*day*) **of the bright fortnight of Āshāḍha in the cyclic year Prabhava, the 10th of the** (*regnal*) **era of the Chāḷukya majestic Emperor king Jagadēkamalla,** coincided with the *dakshiṇāyana-saṁkrānti* and a *vyatīpāta*,[3] (*Mēcharasa*), having laved the feet of **Jñānasōma Paṇḍita-dēva,** prior of the establishment of the god Sōmanātha, made over to him with pouring of water (*the above-mentioned estate*) on *sarva-namasya* tenure, free from all conflicting claims.

(Lines 58-61.) As regards the bounds of this hundred-*mattar* field of endowment-land:—the north-eastern bound is a stone (*with the figure*) of a Kinnarī at the northern side of the waste lands of Iṭṭage. As to the eastern bound, the limit is the running stream in the lands of Iṭṭage. As to the south-eastern bound, the limit is a stone (*with the figure*) of a Kinnarī on the river-bank to the east of the waste of Kāntarike. As to the south-western bound, the limit is a stone (*with the figure*) of a Kinnarī at the south of Benaka's Lake. The north-western bound is a fixed boundary-stone (*with the figure*) of a Kinnarī on the south of the lands of Niṭṭūr. Thus the four bounds are concluded.

(Verse 31.) Out of the hundred *mattar* (*assigned*) for the finial, this general **Mēchaṇa,** who is indeed adorned with glory, world-famed, crowned with Śiva's feet, has granted excellent land, six *mattar* for the well of Nandi, six for the well of Gaurale faultless in virtue, thus (*amounting to*) twelve *mattar*.

(Verse 32: a common Sanskrit formula.)

(Verse 33: a Kanarese commonitory stanza.)

(Line 64.) The poem (*is that*) of an eminent scholar among Kanarese master-poets. The engraving (*is that*) of **Chāvōja,** eldest son of **Jinnōja** of **Puligere,** emperor of stone-masons.

No. 9.—TWO JAIN INSCRIPTIONS OF MULGUND AND LAKSHMESHWAR.

BY LIONEL D. BARNETT.

The following two inscriptions have been edited from ink-impressions prepared for the late Dr. Fleet, and bequeathed by him to the British Museum, where they now are. Though they relate to different foundations, they refer to the same lineage of Jain Gurus, and have two important verses in common; and this fact, together with their mention of the standard grammars of their day, gives them a more than ordinary interest.

[1] On this term see *Ind. Ant.*, Vol. XXX, pp. 107, 267; *Ep. Carn.*, Vol. X, pt. i, Mb. 172 f., 259, CB. 9, Bg. 71, Ct. 1, 14. It is a remission of $\frac{1}{10}$ of the revenue, under varying conditions (e.g. as compensation for some public work, such as digging and maintaining wells).

[2] The meaning of *kaṇḍa* here is not clear. There may be some connection with the Tamil *kaṇḍu*, 'cornfield,' or with the Marathi usage in the sense of 'contract.'

[3] A *yōga* on which the declination of sun and moon is the same.

A.—MULGUND INSCRIPTION OF THE REIGN OF SOMESVARA I: SAKA 975.

Regarding the site and name of **Mulgund**, whence this inscription comes, it suffices to refer to Dr. Fleet's remarks above, Vol. XIII, p. 190. The present record was found on a slab in the local Jain *basti* or temple. The stone is surmounted by a rounded pediment with truncated top, which contains some **sculptures**, viz. in the centre a squatting Jina in a niche or *kōshṭha-pañjara*; on the proper right a figure, perhaps representing a worshipper; over it the sun; to the proper left of the Jina, a cow with sucking calf; and above it the moon. Below this is the inscribed area, in two compartments, with a width of about 2 ft. 4½ in.; the upper one, containing lines 1-2, is about 3¾ in. high, and the lower one, containing the rest of the record, is some 4 ft. in height. A transcription is given in the Elliot Collection, Vol. 1, fol. 76b. of the Royal Asiatic Society's copy; but it is very incorrect, and omits a considerable part of the text. The stone is very much worn, and in many places the writing is almost illegible.—The **character** is an elegant monumental type of Kanarese of the period, with graceful upright letters varying in height from ½ in. to ⅝ in.—The **language** is Old Kanarese, with the exception of three Sanskrit stanzas, viz. verses 1, 7, and 10. It preserves the archaic *ḷ*, in *negaḷdaṁ* (ll. 11, 18), *pogaḷte* (l. 16), and *ēḷpatt-* (l. 29). On the word *sīvaṭa* (l. 22) cf. above, Vol. XV, p. 105. For *moggu* (l. 25) see note *in loco*.

The **record**, after invoking the blessing of the Jina Chandraprabha (ll. 1-2), refers itself to the reign of **Trailōkyamalla**, i.e. **Sōmēśvara I** (ll. 3-5), and states that at the time the **Three-Hundreds of Beḷvola and Purigeṛe** were under the administration of his son, the Mahā-Maṇḍalēśvara **Sōmēśvara [II]**, who bears among many other titles that of "**lord of Vēṅgī best of cities**" and "furious elephant of **Amma**" (ll. 5-10). It then introduces a pious and eminent Jain *sandhi-vigrah-ādhikāri*, or officer of peace and war, named **Beḷdēva**; he and his two younger brothers **Baladēva** and **Śāntivarma** were the sons of **Aggaḷadēva** and **Gojjikabbe** (ll. 10-17). Beḷdēva was a "servant" or "soldier" (*baṁṭu*) of **Kēśirāja**, and a disciple of **Nayasēna Sūri** (ll. 17-19). Then come two verses extolling **Kañcharasa**, a local prince of the **Sinda** family,[1] who was induced by **Beḷdēva** to make a grant out of his own *sīvaṭa* (ll. 19-22). Next comes the spiritual pedigree of Nayasēna, and a eulogy of the latter's learning: in the **Sēna** or **Chandrakavāṭa** *anvaya* of the **Mūla Saṅgha** there was an eminent divine named **Ajitasēna Bhaṭṭāraka**, whose disciple was **Kanakasēna Bhaṭṭāraka**, whose pupil was the eminent grammarian **Narēndrasēna**, who was the teacher of the incomparable grammarian **Nayasēna** (ll. 22-28). An estate, duly specified, and apparently in the *sīvaṭa* of Kañcharasa, was made over by Beḷdēva to Nayasēna as trustee for the supply of food to the local *basti* (ll. 28 ff.).

The above-mentioned **Ajitasēna** may very possibly be the famous Jain divine of that name, who was the prior of the Baṅkāpūr monastery, and who was the spiritual guide of the Western Gaṅga king **Mārasiṁha II** (who piously starved himself to death at Ajitasēna's feet) and of the minister **Chāmuṇḍarāya**[2] (*E. I.*, Vol. V, pp. 152, 171, 180; *Ep. Carn.*, *Inscr. Sravana Belgola*, Nos. 38 and 67, and introduction, pp. 20 and 34; *Ep. Carn.*, Vol. VI, Kp. No. 3, and introduction, p. 11). He appears to have been a teacher of a Kanakasēna, entitled Vādi-rājā, who is mentioned in several inscriptions as a disciple of Akalaṅka and teacher of the Gaṅga king Rāchamalla (*Ep. Carn.*, Vol. VIII. ii., Nr., Nos. 35-7, 39, Tl., No. 192). This Ajitasēna must be distinguished from the scholar of the same name, styled Vādibhasiṁha, Śabda-chaturmukha, and Tārkika-chakravartin, who was a later scion of the same spiritual lineage,

[1] On the Sindas see above, Vol. XIV, p. 268.

[2] A *Śṛiṅgāra-mañjarī* or series of erotic verses is ascribed to him (see Seshagiri Sastri's *Report*, II, pp. 83, 231 f., 234); but it seems more natural to refer it to the other Ajitasēna mentioned below—if indeed to any Ajitasēna.

and who flourished in the first half of the twelfth century A.D. (see *E. I.*, Vol. III, p. 188; *Ep. Carn., Inscr. Sravana Belgola*, No. 54; *Ep. Carn.*, Vol. VIII. ii., Nr., Nos. 35-7, 39, Tl. 192). It is not clear which of these two Ajitasēnas was the author of the *Alaṅkāra-chintā-maṇi*[1] and *Maṇi-prakāśikā* (a supercommentary on the grammar of Śākaṭāyana) mentioned by Mr. Rice in his introduction to the *Karṇāṭaka Śabdānuśāsana*, p. 35. We find a similar duplication of Kanakasēnas; for the one mentioned in our record can hardly be the same as Kanakasēna the disciple of Vinayasēna (*E. I.*, Vol. X, pp. 57, 69), or Kanakasēna the disciple of Vīrasēna, *circa* A.D. 880 (*ibid.*, Vol. XIII, pp. 191, 193 f.), while a tradition records yet another as preceptor of Jinasēna the teacher of Mallishēṇa.

The grammarian **Narēndrasēna** of our record seems to be the same as Narēndrasēna, the author of a work on logic styled *Pramāṇa-pramēya-kalikā* (see S. R. Bhandarkar, *Catalogue of MSS. in Deccan College*, p. 327; A. V. Kathavate, *Report for 1891-5*, p. 76; Kashinath Kunte, *Statement showing old and rare MSS. in Gujranwala and Delhi Districts*, 1881-2, p. 11; Peterson, *First Report*, p. 126). But our inscription B. will introduce us to a second Narēndrasēna, a disciple of Nayasēna, who may also have some claim to this distinction.

The **date** of our record is given on l. 29 as: **Śaka 975 (lapsed), the year Vijaya**; the *uttarāyaṇa-saṁkrānti*. This ought to correspond to **Friday, 24 December, A.D. 1053**, when the *saṁkrānti* occurred about 1 h. 35 m. after mean sunrise, according to the *Ārya-siddhānta*.[2]

The only **geographical names** mentioned are: the **Beḷvola Three-Hundred** (l. 9), the **Puligeṛe Three-Hundred** (*ib.*), **Muḷgunda** (l. 21), **Kiṛugeṛe**, or "Little Tank" (l. 31), and **Asagageṛe** (l. 33). On the first two see above, Vol. XIII, p. 178 f., and XIV, p. 188. The **Chandrakavāṭ-ānvaya** (l. 23) preserves the name of Chandrikavāṭa, on which see above, Vol. XIII, pp. 192-4.

TEXT.[3]

[**Metres**: vv. 1, 4, *Śārdūlavikrīḍita*; v. 2, *Mahāsragdharā*; v. 3, *Utpalamālā*; vv. 5, 6, 8, *Kanda*; vv. 7, 10, *Anushṭubh*; v. 9, *Mattēbhavikrīḍita*.]

1 Śrīmad-bhakti-bhar-ānat-āmara-kirīṭ-ānarggha-ratna-prabhā-jāḷ-āḷiḍa(ḍha)-pad-
āravinda-yugaḷaḥ Kandarppa-darpp-āpahaḥ

2 traiḷōky-ōdara-vartti-kīrtti-viśadaś=Chandraprabhas=suprabhō bhavyānāṁ nivahaṁ
nirākuḷam=aḷaṁ pāyād=apāyāj=Jinaḥ [||* 1*]

3 Svasti samasta-bhuvan-āśraya Śrī-Pṛithvī-vallabha mahārāj-ādhirāja paramēśvara
parama-bhaṭṭārakaṁ Satyā-

4 śraya-kula-tiḷakaṁ Chāḷuky-ābharaṇaṁ śrīmat-Traiḷōkyamalla-dēvara vijaya-rājyam=
uttarōttar-ābhivṛiddhi-prava-

5 rddhamānam=ā-chandr-ārkka-tāraṁ saluttam-ire [|*] Tat-tanayaṁ samadhigata-paṁcha-
mahā-śabda-mahāmaṇḍaḷēśvaraṁ Vēṅgī-

6 puravar-ēśvaraṁ samara-prachaṇḍaṁ kumara-mārttaṇḍaṁ para-kari-madā-nivāraṇan=
Ammana gandha-vāraṇaṁ parivāra-nidhānaṁ

[1] This work was first published in pts. 1-6 of the *Kāvyāmbudhi* edited by Padmaraja Pandit (Bangalore, 1893 ff.); but, as far as I am aware, it was never completed in that series. A full text has since been issued, in Śaka 1829 (A.D. 1907), from the Jinēndra Press at Kolhapur, edited by Sakharam Nemichand Dosi of Sholapur, who on the title-page ascribes it to Jinasēnāchārya.

[2] Mr. R. Sewell has very kindly pointed out to me that according to the *Sūrya-siddhānta* the *uttarāyaṇa-saṁkrānti* of that year took place 2 h. 10 m. after mean sunrise on Friday, 24 December, but that by the *Brahma-siddhānta*, the *Siddhānta-śirōmaṇi*, and probably also the *Rāja-mṛigāṅka* it happened at 2 h. 9 m. 38 s. after mean sunrise on Thursday, 23 December.

[3] From the ink-impression.

7 dāna-Kānīnaṁ haya-Vatsa-rājaṁ rūpa-Manōjaṁ ripu-nṛipati-hṛidaya-sellaṁ bhuvan-
aika-mallaṁ maṇḍalika-śirō-
8 maṇi Chāḷukya-chūḍāmaṇi vidvishṭa-saṁhāraṁ kaṭaka-prākāraṁ śrīmat-
Traiḷōkyamalla-dēva-pāda-paṁkaja-bhra-
9 maraṁ śrī-Sōmēśvara-dēvaṁ Beḷvola-mūnūṟuṁ Puligeṟe-mūnūṟumaṁ sukha-
saṁkathā-vinōdadin=āluttam-i-
10 re tat-pāda-padm-ōpha(pa)jīvi || Vṛittaṁ | Vinayakk=ādhāra-bhūtaṁ pati-hita-
charitakk=āśrayaṁ sad-vivēkakke[1] nivāsa[—⌣]
11 saṁpattige kuḷa-bhavaṇaṁ santat-ānūna-dānakke nidhānaṁ māntanakk=āgaram=
ene negaḷdaṁ sad-vachō-bhūshaṇaṁ bhū-vinu[taṁ Be]-
12 ḷdēvan=udyad-vidhu-viśada-yaśō-vyāpta-dik-chakravāḷaṁ || [2*] Īva guṇaṁ guṇaṁ
pati-hit-ācharitaṁ charitaṁ par-ōpa[kā]-
13 r-āvasath-ārttham=artthaṁ=agha-bi(bhi)j-Jina-tat[t*]vame tat[t*]vam=emba sad-
bhāvane tammol=ondi nele-vett-ire kīrttige nōntar=int[u]
14 Beḷdēvanum=oḷpan=āḷda Baladēvanum=aṁkada Śāntivarmmanuṁ || [3*]
Vachanaṁ || Antu sakala-guṇa-gaṇ-ōttuṁgaruṁ Jina-dharmma-
15 nirmmaḷaruṁ nikhiḷa-jan-ōpakāra-niratarum=udātta-kīrtti-latā-nikētanarum=Aggaḷadēva-
priya-tanūbhavaruṁ Gojji-
16 kāṁbikā-kṛiś-ōdara-nibiḍa-nibaddha-paṭṭaṟum=āgi pogaḷte-vetta tat-sahōdara-trayadoḷ=
agrabhavan=appa sandhi-vigra-
17 h-ādhikāri || • Vṛittaṁ | Jina-pād-āṁbuja-bhṛiṁgan=Aṁgaja-nibhaṁ gamy-ârttha-
ratnākaraṁ Manu-mārggaṁ vinay-ārṇṇavam Kali-mala-pradhvaṁsa-
18 kaṁ Kēśirājana baṁṭ=iṁ Naya[sē]na-sūri-pada-padm-ārādhanā-rakta-chittan=
udāttaṁ negaḷdaṁ vivēka[⌣⌣ — — —] mahī-bhāga-
19 dol || [4*] Ā mah-ānubhāvaṁ dharmma-prabhāva-prakaṭīkṛita-chittan=āge ||
Kandaṁ | Sinda[⌣—⌣]kan=abaḷ-ānandanakara-rū-
20 pan=asama-sāhasa-niḷayaṁ Sinda-nṛipa-nandanaṁ lasad-indu-kara-pratima-kīrtti
kāntā-kāntaṁ || [5*] Jina-dharmma-nirmmaḷaṁ satya-nidhā-
21 nu(nan=a)nūna-dāna[⌣⌣ ⌣⌣ ⌣]an=andina Kaṁcharasaṁ Paṁchēshu-nibhaṁ
Muḷgunda-Sinda-dēśa-lalāmaṁ || [6*] Emba pempiṁgaṁ jasakkam=āgaram=ā-
22 da Kaṁcharasaṁ tanna sīvaṭad-oḷage dharmm-ānurāga-chittaṁ sa-hiraṇya-
pūrvvakaṁ kuḍe koṇḍu || Śrī-Mūḷa-saṁgha-vārā-
23 śau maṇīnām=e(i)va s-ārchchishāṁ mahā-purusha-ratnānāṁ sthānaṁ Sēn-ānvayō=
jani || [7*] Va | Ā Chandrakavāṭ-ānvaya-varishṭha-
24 r=Ajitasēna-bhaṭṭārakar=ttad-antēvāsigaḷ Kanakasēna-bhaṭṭārakar=avara śishyar ||
Kanda | Chāndraṁ Kātaṁtraṁ Jainēndraṁ Śa-
25 bd-ānuśāsanaṁ Pāṇini matt=Aindraṁ Narēndrasēna-munīndraṁg=ēk-āksharaṁ
peṟaṁg=ivu moggē || [8*] Antu jagad-vikhyātar=ādar=a-
26 vara śishyar || Vṛitta | Ninag=ōn=embono Śākaṭāyana-munīśan=tāne Śabd-
ānuśāsanadol Pāṇini Pāṇinīyadoḷe Chandraṁ Chā-
27 ndradoḷ taj-Jinēndrane Jainēndradoḷ=ā Kumārane gaḍaṁ Kaumāradoḷ=pōlpar=ent=
ene pōlar=Nnayasēna-paṇḍitaroḷ=anyar=vvārddhi-
28 vīt-ōrvviyoḷ || [9*] Intu samasta-śabda-śāstra-pārāvāra-pāragar=Nnayasēna-paṇḍita-
dēvara pāda-prakshāḷanaṁ-ge-
29 ydu | Śaka-varsham=oṁbay-nūṟ-ēḻpatt-aydaneya Vijaya[2]-saṁvatsarad=uttarāyaṇa-
saṁkrāntiyaṁdu tīrtthada ba-

[1] The engraver has apparently written another letter (*ve* ?) after the *vē*, and then partly blocked it out.
[2] The syllable *vi* has been omitted, and added below the line.

30 sadiga=āhāra-dāna-nimittaṁ nij-āṁbikey=appa **Gojjikabbegé** parōksha-vinayaṁ nagara-mahājanamuṁ paṁcha-maṭha-sthā-

31 namum=ariye Nagarēśvarada gaḍiṁbada kōloḷ=aḷedu Kiṟugeṟeya keyy-oḷage sarbba-bādhā-parihāram=ā-

32 ge [b]i[ṭṭa] key=mattar=ppanneraḍu [|*] ā keyge guḍḍe ïśānyadoḷ kavileya kal āgnēyadoḷ=ādityana kal *nairi(ṟṛi)-

33 tyadoḷ chaṁdrana kal vāyavyadoḷ Padmāvatiya kal Asagageṟeya teṁka sāsira baḷḷiya tōṁṭav=ondu || Sva-datt[ā]ṁ

34 [para-dattāṁ vā] yō harēta vasundharāṁ [|*] shashṭir=vvarsha-sahasrāṇi vishṭhāyāṁ jāyatē kṛimiḥ ||[1] [10*]

TRANSLATION.

(Verse 1.) May the radiant Jina Chandraprabha, whose blest pair of lotus-feet is licked by the mass of lustre from priceless gems in the coronets of gods bowing (*to him*) in intensity of devotion, who overthrows the pride of the Love-god, who is brilliant with glory pervading the belly of the three worlds, fully preserve from harm the congregation of the godly (*so that it be*) undisturbed.

(Lines 3-5.) While the victorious reign of—hail!—the asylum of the whole world, favourite of Fortune and Earth, great Emperor, supreme Lord, supreme Master, ornament of Satyāśraya's race, embellishment of the Chāḷukyas, **Traiḷōkyamalla-dēva**, was advancing in a course of successively increasing prosperity, (*to endure*) as long as moon, sun, and stars:—

(Lines 5-10.) While his son, the Mahā-Maṇḍalēśvara who has obtained the five great musical sounds, **lord of Vēṅgī best of cities**, terrible in battle, a sun among princes, checking the fury of foemen's elephants, a fiery elephant to **Amma**, a treasure to his household, a Kāṇīna [Karṇa] in bounty, a king of the Vatsas with horses,[2] a Cupid in beauty, a shaft in the heart of hostile kings, unique athlete of the world, head-jewel of feudatory princes, crest-jewel of the **Chāḷukyas**, a destruction to foes, a rampart to the camp, a bee to the lotus-feet of **Traiḷōkyamalla-dēva, Sōmēśvara-dēva**, was governing the **Belvoḷa Three-Hundred** and the **Puligeṟe Three-Hundred** with enjoyment of pleasant conversations:—

(Line 10.) One that finds sustenance at his lotus-feet—

(Verse 2.) As a foundation of courtesy, a resort of loyalty, a dwelling-place of discernment of truth, a native house of prosperity, a treasure of constant unstinted bounty, a home of dignity was **Beḷdēva** renowned, adorned with goodly speech, world-famed, filling the circle of space with glory bright as the rising moon.

(Verse 3.) "Merit is the merit of giving; conduct is loyalty to one's lord; wealth is designed to be a dwelling for beneficence; principles are the principles of the sin-destroying Jinas": as this true conception came and established itself in them, accordingly **Beḷdēva** and the excellent **Baladēva** and the eminent **Śāntivarma** fulfilled their religious duties with glory.

(Lines 14-17.) Thus of these three brethren, who were famed as exalted in the series of all virtues, stainless in the religion of the Jinas, unceasing in beneficence to all people, homes of the creeping-plant of lofty fame, dear sons of **Aggaḷadēva**, and cloths tightly swathing the slender belly of **Gojjikāmbikā**,[3] the eldest, a Minister of Peace and War—

(Verse 4.) A bee to the Jinas' lotus-feet, like the Love-god, a jewel-mine of fitting thoughts, following the course of Manu, an ocean of courtesy, dissipating the defilement of the Kali Age,

[1] After this verse are some very worn letters; the first two are quite effaced, and the remainder look like *ga ḷa ña ma ā la*.

[2] See above, Vol. V, p. 236 n.

[3] [The translation of the phrase *Gojjikāmbikā-kṛiś-ōdara-nibiḍa-nibaddha-paṭṭarum=* as an adjunct to the three brothers Beḷdēva etc. would be more intelligible if rendered "whose fillet (*of greatness*) was firmly tied (*even while they were*) in the slender belly of Gojjikāmbikā."—H. K. S.]

a henchman of **Kēśirāja**, having moreover a mind fervent in adoration of **Nayasēna Sūri's** lotus-feet, lofty, . . . discernment, he was renowned in the land.

(Line 19.) As this noble man revealed his spirit in his eminent practice of religion :—

(Verse 5.) A . . . of the **Sindas**, one whose form gave delight to women, a seat of peerless courage, son of the **Sinda** king, having fame like the radiant moonbeams, beloved of lovely women,

(Verse 6.) stainless in the religion of the Jinas, a treasure of truthfulness, . . . unstinted bounty, is **Kañcharasa**, resembling the (*God of the*) Five Arrows [Kāma], an ornament to the **Sindas'** land of **Mulgunda**.

(Lines 21-22.) He who, receiving from **Kañcharasa**, (*i.e.* Beldēva) a seat of such greatness and fame, being inspired to religion, made a grant out of his own *śivaṭa*[1] with presentation of gold :—

(Verse 7.) There has arisen the **Sēna** lineage, a seat of radiant gems, jewels consisting of great men, in the ocean of the blest **Mūla Saṅgha**.

(Lines 23-24.) **Ajitasēna Bhaṭṭāraka**, worthiest of the **Chandrakavāṭa** lineage—his disciple **Kanakasēna Bhaṭṭāraka**—his disciple—

(Verse 8.) The Chāndra (*grammar*), the Kātantra, the Jainēndra (*grammar*), the Śabdānuśāsana, Pāṇini, and the Aindra (*grammar*) were to the great Muni **Narēndrasēna** a single letter; to what other man āre they possible ?[2]

(Lines 25-26.) Thus world-renowned was his disciple—

(Verse 9.) What shall I say of thee ? As it may be said, "How now, is the great sage Śākaṭāyana himself equal (*to Nayasēna*) in the Śabdānuśāsana, Pāṇini in the Pāṇinīya, Chandra in the Chāndra, that Jinēndra in the Jainēndra, that Kumāra forsooth in the Kaumāra ?", there are no others equal to **Nayasēna-Paṇḍita** on the ocean-girt earth.

(Lines 28-33.) Having laved the feet of **Nayasēna Paṇḍita-dēva**, who is thus a consummate master of all grammatical lore, at the *uttarāyaṇa-saṁkrānti* of the cyclic year **Vijaya**, the nine hundred and seventy-fifth (*year*) of the Śaka era, he[3] with the cognisance of the Mahājanas of the town and the establishment of the Five Maṭhas measured out by the pole of the Nagarēśvara's *gaḍimba*-standard and granted for the purpose of supplying food to the temple of the sacred demesne, in pious memory of his mother **Gojjikabbe**, a field of twelve *mattar* in the field of Kiṟugeṟe, with immunity from all conflicting claims. The bounds[4] of this field are: on the north-east a stone (*with the figure*) of a cow, on the south-east a stone (*with the figure*) of the sun, on the south-west a stone (*with the figure*) of the moon, on the north-west a stone (*with the figure*) of Padmāvatī,[5] to the south of Asagagere a garden of a thousand creeping-plants.

(Verse 10 : a common Sanskrit formula.)

---

[1] See above, Vol. XV, p. 105.

[2] *Moggu*, meaning "possible," "able," "ability," etc., is not given in Kittel's Dictionary. Rao Bahadur R. Narasimhachar, to whose kindness I owe the interpretation of this passage, has called my attention to its use in *Pampa-bhārata*, XII, 16, Pampa's *Ādi-purāṇa*, VI, 29, Abhinava-Pampa's *Rāmāyaṇa*, I, 39, Nāgavarma's *Kāvyāvalōkana* 517, and Āṇḍayya's *Kabbigara Kāva* 156.

[3] Namely Beldēva.

[4] Properly, *guḍḍe* means a hill. "In S. Canara, this is sometimes the boundary-mark of lands; sometimes a stone exists or is placed at the top of a hill to mark the point from which rain-water commences to scatter in all directions and water adjacent lands" (*Kisamwār Glossary*, p. 129).

[5] Cf. *Ind. Ant.*, Vol. V, p. 43 n., *Ep. Carn.*, II (*Śravaṇa Belgoḷa*), intr., p. 25 f., *Madras Archæol. Report*, 1912-3, p. 6, 1914-5, p. 19, and above, Vol. VIII, p. 126, etc.

B.—LAKSHMESHWAR INSCRIPTION OF THE REIGN OF VIKRAMADITYA VI: A.D. 1081.

On the site of Lakshmēshwar (the ancient Puligeṛe, Purigeṛe, or Purikara) I may refer to what I have written above, Vol. XIV, p. 188. The inscription is on a slab which was in the local Kachāri when the ink-impression was made; whence it originally came I do not know. The stone has a rounded pediment with some sculptures, namely a squatting Jina in the centre, with a cow and sucking calf on the proper left, surmounted by the sun (to right) and moon (to left); a figure or figures has apparently been effaced on the proper right. The inscribed area below this is about 3 ft. 2 in. broad and 3 ft. 6 in. high.—The character is a fairly regular Kanarese type of the period, slightly angular and sloping. The letters vary from about ¼ in. to ½ in. in height, and in places are somewhat worn. The cursive *v* occurs in *avar-*, l. 30.—The language is Old Kanarese, the only Sanskrit is verse 1 and a short quotation in verse 7. The archaic *ḷ* is preserved in *pogaḷtegaṁ*, l. 9, *negaḷtegaṁ*, l. 9, *iḷduv-*, l. 15, *negaḷdara*, l. 16, *iḷd-*, ll. 18, 24, *negaḷda*, l. 43, *negaḷdan*, l. 44; it appears as *r* in *kirttu*, l. 3, *negartte*, l. 46, and as *ḷ* in *Noḷaṁba*, ll. 8 ff., 23, *pogaḷal*, ll. 17, 26, *negaḷdar*, l. 36, *pēḷvaḍe*, l. 39, *pogaḷalk-*, l. 42; and it is falsely substituted for *r* in *peḷchutt-ire*, l. 18. It will be noted that in *negaḷdara*, l. 16, *negaḷda*, l. 43, and *negaḷdan*, l. 44, the second syllable is short metrically, while in *negartte*, l. 46, it is scanned as long (cf. above, Vol. XIII, p. 327); hence it seems likely that *negaḷdar*, l. 36, where it is also short, is a scribe's error for *negaḷdar*. Lexically interesting are *avasura*, l. 14 (apparently meaning *asura*: cf. *avakripe*, *avaguṇa*, etc.), *uddāni*, l. 18 (cf. above, Vol. XIII, p. 327), *bhuvana-bumbhuka*, l. 19 (ib. pp. 298, 327), *prābda*, l. 26, *pabb*[*e**], l. 26, *arttiga* in the sense of "lover," l. 38, and *gōja* with the meaning of "moon," l. 39 (cf. *abja*).

The record, opening with the stock stanza *Śrīmat-parama-gaṁbhīra*° (l. 1), refers itself in prose and verse to the reign of **Tribhuvanamalla**, or **Vikramāditya [VI]** (ll. 2-5), and then introduces his younger brother **Jayasimha III**, the Yuvarāja or Heir-apparent, to whom, besides many complimentary titles, it gives the full set of names found in some other records, **Traiḷōkyamalla Vīra-Noḷamba Pallava-Permānaḍi Jayasiṁha-dēva** (ll. 5-8).[1] After two verses of florid compliments to him (ll. 8-10) and a statement in prose that he was at the time governing the "**Two Three-hundreds**" (namely **Beḷvola** and **Puligere**), the **Banavāse Twelve-thousand**, the **Sāntaḷige Thousand**, and the **Kaṇḍūr Thousand** (ll. 10-11), it brings in one of his subordinate barons, the *Mahāsāmantādhipati* **Eremayya** (also called below **Erakapa** and **Erega**), a high minister, steward of the royal household, and general (ll. 11-13), dwelling in verse upon his virtues and informing us that at the time he was administering the **Puligere Three-hundred** (ll. 13-19). Six verses follow (ll. 19-26), which expatiate on the equally surprising merits of Eremayya's younger brother **Dōṇa**, who also held high office in the government; and then comes a series of seven stanzas (ll. 26-34) announcing that on a given date Dōna assigned a grant for the Jain cult in Purikara (the modern Lakshmēshwar) to the trusteeship of **Narēndrasēna [II]**, of the Sēna Gaṇa in the Mūla Saṅgha, the senior disciple of **Nayasēna Sūri**, who in his turn was the senior disciple of **Narēndrasēna [I]**. We have already made the acquaintance of Narēndrasēna I and Nayasēna in the preceding record; the present record, which quotes stanzas 8-9 of A., now carries the succession one generation further on. Our author next brings on the scene in vv. 23-34 (ll. 34-46) a distinguished family of pious Jains, namely **Dinakara** (ll. 34-36), his sons **Rājimayya** (or **Rāja**) and **Dūḍama** (ll. 36-42), Dūḍama's wife **Ēchikabbe** and their daughter **Hammikabbe** (ll. 42-43). Hammikabbe's husband **Arasimayya** or **Arasayya** (ll. 43-44), their son the physician **Kannapa** or **Kanna** (ll. 44-45), and Kannapa's sons **Indapa**, **Īśvara**, **Rāji**, **Kalidēva**, **Ādinātha**, **Śānti**, and **Pārśva** (ll. 45-46). Here the record breaks off; apparently it was

[1] See *Dynast. Kanar. Distr.*, pp. 453 f.

never finished. But it would seem that one of the last members of this pedigree was in some way concerned in the grant, perhaps as having petitioned Dōṇa for it.

Of **Dūḍama** certain exploits are reported (ll. 39-42) which are rather obscure, owing to the loose and vague language used by the poet. The words seem to mean: "At the stern command of the sovereign he took captive the **Lord of the Eighty-four** . . . he in his turn took captive . . . **Sōbhana**, who in wrath had seized, bound, and cast into prison king **Inda** . . . By his might of arm he took captive him who had cast his master into confinement, and made him release him." The data given by the record are too scanty to enable us to identify these persons. Very possibly the "Lord of the Eighty-four" may be a **Kadamba** king, whose dynasty is regularly described in its titles as *chaturaśīti-nagar-ādhishṭhita*, "presiding over eighty-four cities." An inscription of Śaka 907 at Hūli (Elliot Collection, Royal Asiatic Society's copy, Vol. II, fol. 336a.) mentions a person named Sōbhanayya, whose *pergaḍe* made a raid upon Hūli in that year; but it is unsafe to connect him with the Sōbhana of our record.

The date is given on l. 26 as: the sixth year of the Vikrama era, Durmati; Pushya kṛishṇa 6, a Friday; the *yōga vyatīpāta*; the *uttarāyaṇa-saṁkrānti*. This is regular. The *tithi* mentioned was current on **Friday, 24 December, A.D. 1081**, when it ended about 9 h. 47 m. after mean sunrise (for Ujjain). The *uttarāyaṇa-saṁkrānti* occurred on the same day 7 h. 25 m. after mean sunrise, while the *tithi* kṛi. 6 was still current.

The places mentioned are the "**Two Three-hundreds**" (i.e. those of Belvola and Puligere), l. 10, the **Banavāse Twelve-thousand**, l. 10, the **Sāntaḷige Thousand**, l. 11, the **Kaṇḍūr Thousand**, l. 11, the **Puligere Three-hundred**, l. 18, and the town of **Purikara** (i.e. Puligere), l. 29.

TEXT.[1]

[Metres: v. 1, *Anushṭubh*; vv. 2, 3, 6, 9, 14, 23, 26, *Mahāsragḍharā*; vv. 4, 5, 7, 10-12, 17-19, 24, 25, 29-32, *Kanda*; vv. 8, 21, 27, 33, 34, *Champakamālā*; vv. 13, 15, *Utpalamālā*; vv. 16, 20, 22, 28, *Mattēbhavikrīḍita*.]

1 ॐ Śrīmat-parama-gaṁbhīra-syād-vād-āmōgha-lāṁchchhanaṁ jīyāṭ=trailōkya-nāthasya śāsanaṁ Jina-śāsanaṁ || [1*]

2 Svasti samasta-bhuvan-āśraya Srī-Pri(pṛi)thvī-vallabha mahārāj-ādhirāja paramē-śvara parama-bhaṭṭārakaṁ **Satyāśraya-kuḷa-tiḷakaṁ Chāḷuky-ā-**

3 bharaṇaṁ śrīmat-**Tribhuvanamalla-dēva** || Vṛitta || Dhareyaṁ vārāsi(śi)-paryantam=anavayavadiṁ durvvinīt-āvanīpāḷara bēraṁ kirttu nīroḷ=galagalan=aled=ī-

4 ḍ-āḍi mun-nintu chakrēśvarar=āṛ nishkaṁṭakaṁ māḍidar=ene mahi nishkaṁṭakaṁ māḍi chakrēśvara-ratnaṁ santataṁ pāḷisidan=atibaḷaṁ **Vikramāditya-dēvaṁ** || [2*] Antu śrīma-

5 t-**Tribhuvanamalla-dēvara** vijaya-rājyam=uttarōttar-ābhivṛiddhi-pravarddhamānam=ā-chaṁdra-tāraṁ saluttam-ire || Tad-anujaṁ svasti samasta-bhuvana-saṁstūyamāna lō-

6 ka-vikhyātaṁ[2] **Pallav-ānvayaṁ** Śrī-Mahī-vallabha **yuvarāja** rāja-Paramēśvaraṁ vīra-Mahēśvaraṁ vikram-ābharaṇaṁ jaya-lakshmī-ramaṇaṁ śaraṇ-āgata-rakshāmaṇi **Chāḷu-**

[1] From the ink-impression.

[2] This *anusvāra* is rather doubtful.

7 kya-chūḍāmaṇi kadana-Triṇētraṁ kshatriya-pavitraṁ matta-gaj-Āṁga-rājaṁ sahaja-Manōjaṁ ripu-rāya-sūṟekāṟan=aṇṇan=aṁkakāṟaṁ śrīmat-Traiḷōkyamalla

8 Vīra-Noḷaṁba Pallava-Permmānaḍi Jayasiṁha-dēva || Vṛitta || Para-chakr-ākāḷa-chakraṁ Naḷa-Nahusha-Nṛig-ādy-ādi-bhūpāḷak-āḷī-charitaṁ Chāḷukya-chūḍāmaṇi sahaja-Manōjaṁ nat-ārā-

9 ti-bhūmīśvara-saṁghāt-ōttamāṁg-ācha(bha)raṇa-maṇi-gaṇa-jyōtir-uttaṁsa-bhāsvach-charaṇaṁ sāmānyanē bhūparoḷ=apagata-vidviṭ-kadaṁbaṁ Noḷaṁba || [3*] Vachana || Enisida pogaḷtegaṁ negaḷtegaṁ neley=e-

10 nisi || Ka || Arasu-guṇaṁgaḷ mey-vett-ire page migad-ire jan-ānurāgaṁ pirid-āg-ire kīrtti-latike nimirutt-ire Vīra-Noḷaṁban=avanat-āri-kadaṁbaṁ || [4*] Va || Eraḍ[u mū]nūṟumaṁ Banavāse-pannirchchāsiramu-

11 mam Sāntaḷige-sāsiramumaṁ Kaṁḍūr-ssāsiramumaṁ sukha-saṁkathā-vinōdadiṁ pratipāḷisuttum-ire | tat-pāda-padm-ōpajīvī | samadhigata-paṁcha-mahā-śabda-mahās[ā*]mantādhipati mahā-pra-

12 chaṇḍa-daṇḍanāyakaṁ ripu-mastaka-nyasta-sāyakaṁ sāhitya-vidy-āṁganā-bhujaṁga Sarasvatī-mukha-kamaḷa-bhṛiṁgaṁ(a)n=ārādhita-Hara-charaṇa-smaraṇa-pariṇat-āntaḥ-karaṇaṁ | Sarasvatī-karṇṇ-ābharaṇaṁ

13 śrīman-mahāpradhānaṁ mane-verggaḍe daṇḍanāyakan=Ereyamayyaṁ || Kaṁda || Sakaḷa-kaḷā-Brahmaṁ Brahma-kul-ārkkaṁ Vatsa-gōtra-ratnākara-śītakaraṁ kiṟiyane bhuvana-prakaradoḷ=a-

14 ri-mṛityu-bhūpan=Eṟega-chamūpaṁ || [5*] Vṛi || Eḷeyoḷu sādṛiśyam=appaṁd=Eṟega-vibhuge biṇpi[ṁ*]ge[1] guṇpiṁge tiṇpiṁg=eḷe pārā[v]āram=Iṁdr-āchaḷam=avasuraniṁ Rāmaniṁ Kṛishṇaniṁ saṁchaḷam [— —]

15 ślishṭa-gaṁbhīramum=aṁ(a)guruvuv=āg-iḷduv=ārayye bōṟ=oṁd=eḷe bōṟ=oud=abdhi bōṟ=ond=animisha-nagam=ettānum=uṁṭ=appoḍ=ak[k*]uṁ || [6*] Kaṁda || Parikipoḍe hasti-maśak-āntaram=enipudu tan[na]

16 [gu]ṇada negaḷdara guṇad=antaram=ene guṇṟi(ṇē)shu kā matsara eṁba budh-ōkta[m]=Eṟega-vibhuge sad-uktaṁ || [7*] Sad-amaḷa-kīrtti-vallari diś-āntaramaṁ teṟap=illad=antu parvvidudu parākramaṁ

17 [⌣ ⌣]sam=iṭṭudu biṇp=eshamāna[2]-bāhyam=ādudu charitaṁ śikhā-padaman=eydidud=ārppina sūnu matte puṭṭidan=enip=antuṭ=āyt=Eṟegan=unnatiyaṁ pogaḷal=samartthar=ār || [8*]

18 Enis-iḷd=ī khyāti vikhyātige salut-ire santaṁ basantaṁ tadīy-āvanig=eṁb=uddāni peḷchu(rchchu)tt-ire Puligeṟe-mūnūṟumam svāmi-saṁpattina peṁpaṁ tāḷdi kai-koṇḍ=anubhavi-

19 [s]utta(ta)m=audāryyadiṁ satyadiṁ Karṇṇanumaṁ mikk=utsavam-ppe(be)tt-iral=Eṟega-chamūpaṁ Bal-Īṁdra-rājya[3]-svarūpaṁ || [9*] Kanda || Tad-anujan=aparimita-guṇ-āspadan=esedaṁ bhuvana-buṁbhukaṁ sura-pa-

20 ti-sampadan=atuḷa-bhuja-baḷaṁ para-sudatī-prakara-Prasūna-bāṇaṁ Dōṇaṁ || [10*] Kalitanadoḷ Kuru-kula-saṁkula-mathanana tamman=anupamān-ākṛitiyoḷ Baladēvana tammaṁ bhuja-bala-

21 doḷ Yama-sutana tamman=Eṟegana tammaṁ || [11*] Eṟegan=aḍi-modaloḷ=ari-nṛipar=eṟagidoḍ=adan=aṟiyen=eṟagad-iral=[e*]ṁb=ūḍ[4]=āg=eṟagisuguṁ gṛiddhr-ādigaḷ=eṟagal=pati-kāryya-

[1] This word has been omitted in the line and inserted between lines 15 and 16.
[2] Read *upamāna-*. [3] Delete *rājya*. [4] Read *ōd-*.

22 bhara-dhurīṇaṁ **Dōṇaṁ** || [12*] Vṛii(vṛi)ttaṁ || Kēṁ(kē)ṇam=udāradoḷ koṇate saj-jana-vṛittiyoḷ=eggu śīḷadoḷ kāṇale bārad=eṁdoḍe peṇar=ssaman=appare mārttya-lōkadoḷ **Dōṇano-**

23 ḷ=aṁgaṇa(nā)-Kusuma-bāṇanoḷ=iśhṭa-viśīshṭa-saṁkuḷa-trāṇanoḷ=Abja-saṁbhava-samāna-samasta-kaḷā-pravīṇanoḷ || [13*] Param-āpta-svāmi deyvaṁ Paśupati jita-vidviṭ-kadaṁbaṁ **Noḷaṁbaṁ**

24 pored=āḷdaṁ taṁde śuṁbhattara-guṇa-gaṇadiṁ mikka **Tikkaṁ** vibhāsvach-charit-āḷaṁkāre **Kalvaṁbike** janani tadīy-āgrajaṁ daṇḍanāth-ōtkara-ratnaṁ rūḍi-vett-iḷd=**Erakapan**=ene **Dōṇaṁ** jasakk=irkke-dā-

25 ṇaṁ || [14*] [Ī] Kali-kāladoḷ vishama-kāladoḷ=ubbaṭey-āytu dharmma-ratnākaran=ērvvinaṁ palavu kāladin=īkshisal=ādud=iṁtu kōḷ-pōkume dharmmam=end=ōsedu tannana kautukam=āge mē-

26 dinī-lōkam=aśēsham=oṁde koraloḷ pogalal=paḍichandam=appinaṁ || [15*] Kamanīya-krama-**Vikram**-ābda-tati-shaṭkaṁ **Durmmati**-prābda-Pushyam=aśuklaṁ Bhṛigu-shashṭiy=oppal=avaṛoḷ kūḍal*u*

27 vyatīpātam=eṁba mahā-yōgamum=uttarāyaṇa-mā(ma)hā-saṁkrāntiyu[ṁ*] mānav-ōttaman=and=uj[j*]vaḷa-kīrtti **Dōṇan**=uru-dharmma-trāṇan=utsāhadiṁ || [16*] Kanda || Parama-Jina-samaya-ratnā-

28 kara-himakara-**Mūḷa**-saṁgha-saṁbhava-śōbh-ākara-**Sēna** - gaṇa - nabba[s*]sthaḷa-sarasija-bāndhavara sita-yaśa[ś*]-śrī-dhavaraṁ(ra) || [17*] Vara-munipara vinata-kshitipara niravadyara **Narēṁdrasēna-**

29 traividyara pāda-prakshāḷana-purassara[ṁ] divya-puradoḷ=ī **Purikaradoḷ** || [18*] Chāṁdraṁ Kātaṁtraṁ Jainēṁdraṁ Śabdānuśāsanaṁ Pāṇini matt=Aiṁdraṁ **Narēṁdrasēna-mu-**

30 nīṁdraṁg=ēk-āksharaṁ peraṁg=ivu moggē || [19*] Avar=agra-śishyaṁ || Ninag=ēn=eṁbeno Śākaṭāyana-munīśaṁ tāne Śabdānuśāsanadoḷ Pāṇini Pāṇinīyadol*u*(ḷe) Chāṁdraṁ Chāṁdradoḷ*u* taj-Jinēṁdra-

31 ne Jainēṁdradoḷ=ā Kumārane gaḍaṁ Kaumāradoḷ=pōlpar=ent=ene pōlar=**Nnaya-sēna-paṇḍitaro**ḷ=anyar=vvārddhi-vīt-ōrvviyoḷ || [20*] Sarasatiyaṁ manō-mudade tāḷdidan=ennan=avajñe-geydan=ān=iren=aval=irkke chiḥ

32 savatiyoḷ=pudu-vāḷvudu kashṭam=endu nishṭhura-vachanaṁgaḷaṁ nuḍidu dik-kariyaṁ parid=ēri kīrtti tāṁ puruḍisi dūripaḷ=vara-tapōnidhiyaṁ **Nayasēna-**sūriyaṁ || [21*] Avar=agra-śishyar || Nata-bhū-

33 pēṁdra-kirīṭa-tāḍita-pad-āṁbuḷōja-dvayaṁ nūtan=apratim-ābhā-ravi tāra-hāra-Hara-hās-ākāsa(śa)-nīhāra-viśṛuta-kīrtti-pramad-ānan-âbja-mukuraṁ hā bāppu sāmānyamē śruta-vārāsi(śi) **Narēṁdra-**

34 sēna-munipaṁ traividya-chakrēśvaraṁ || [22*] Jita-vidvishṭa-pratāp-ānvitadin=adhika-śauryyatvad=āṭōpadiṁd=ūrjjita-bhāsvaj-Jaina - dharmm-ārppita - dri(dṛi)ḍa(ḍha) matiyiṁ vipra-vaṁś-āṁbar-āharppatiy[1]=eṁb=oṁd=udgha-tēja[s*]tvadin=atu-

35 ḷa-baḷ-aiśvaryyadiṁ tyāgad=oṁd=unnatiyindaṁ satyadiṁdaṁ **Dinakaran**=atiśōbh-ākaraṁ puṇya-puṁja || [23*] Dinakaran=ōdayadol tamam=anituṁ tūḷd=ōḍuv=aṇte mithyātva-tamaṁ **Dinakaran**=udi(da)yise nija-kuḷa-

36 vanadiṁ tūḷd=ōḍi kiḍuvud=āṁ vismayamē || [24*] Ātana tanayar=jjana-vikhyātar=Jjina-pada-payōja-bhṛiṁgar=vvinay-ānvitar=ene negaḷdar=akhiḷa-kshmātaḷadoḷ **Rāji-mayyanuṁ Dūḍamanuṁ** || [25*] Vṛitta ||

[1] Read *-āhaḷpatiy* or *-āhaspatiy*.

37 Jina-pād-āmbhōja-bhṛiṁgaṁ sujana-jana-manō-raṁjanaṁ viśva-dhātrī-vinutaṁ digdaṁti-dạnt-āśṛi(śri)ta-viśada-yaśō-bhāsi śiṣṭ-ṣṭa-kalp-āvanijaṁ sat-pātra-dān-ādhikan=enute manō-rāgadiṁ kūrttu vidvaj-janaṁ=e-

38 llaṁ baṇṇikuṁ **Rājanan**=amaḷa-lasat-tējanaṁ nichcha-nichcha || [26*] Manumuni-mārgga-nēma Jina-pūjeyoḷ=arttigan=emdu dāniy=emd=anupama-tējan=emdu śuchiy=emdu dayā-paran=emdu nichchaluṁ manam=o[?se]-

39 d=akkaṛiṁ biḍade baṇṇisuguṁ jagam=eyde kūḍe **Rājanan**=ina-tējanaṁ pasuge gōjanan[1]=āśrita-kaḷpa-bhūjana || [27*] Tat-priy-ānujana sau(śau)ryyad=aḷavaṁ pōḷvaḍe || Kaḍupindaṁ

40 dharaṇīśvaraṁ besase **chaurāsīśanaṁ** bandiyaṁ piḍidaṁ sāhasadindamaṁ muge(gi)yan=**Ind-ōrbbīśanaṁ** kōpadiṁ piḍid=uyd=ā serey-iṭṭa **Sōbhananan**=aty-āścharyyadiṁ bandiyaṁ piḍi-

41 daṁ tān=ene sau(śau)ryyad=ond=aḷav=ad=ōṁ sāmānyamē **Dūḍana** || [28*] Nijapatiyaṁ seṛe-viḍidoḍe bhuja-baḷadiṁ bandi-viḍidu biḍisidan=end=ī trijagaṁ baṇṇisuguṁ sa[d*]-dvija-kuḷanaṁ sau(śau)ryya-

42 sā(śā)ḷiyaṁ **Dūḍamana** || [29*] Int=enisida **Dūḍana** vara-kānte **Manōbhavana** kāntegaṁ rūpinoḷ=atyantaṁ migil=ene pogaḷalk=entuṁ neṛey=aṛiyar=**Ēchikabbeya** rūpa || [30*] Ant=avargge(rge) puṭṭidaḷ sura-kā-

43 nt-ōpame vichaḷad-aḷi-kuḷ-ālaki(ke) vilasan-māntana-samēte budha-jana-chintāmaṇi **Hammikabbe** lalanā-ratna || [31*] Ā negaḷda **Hammikabbeg**=anūna-priyavallabhaṁ Manōbbava-rūpaṁ dānad=eḍe-

44 g=andin=ā Kānīnana vol negaḷdan=**Arasimayyaṁ** jagadoḷ || [32*] Anupamadāna-śīla-guṇa-bhūshaṇa-bhūshitey=āda **Hammikā**-vanitegam=atyudāran=**Arasayya**-mahā-vibhugaṁ vinī-

45 tan=oḷpina kaṇi vaidya-śāstra-kuśaḷaṁ sujan-āgraṇi vaidya-**Kannapaṁ** tane(na)yan=enalke nōntan=ene **Kannana** vol kṛita-puṁṇyan=āvanō || [33*] Jina-padapaṁkaja-bhramaran=**Indapan**=udgha-guṇ-ābdhiy=Īśvaraṁ vi-

46 ne(ṇa)ya-viḷāsi **Rāji** sujanaṁ **Kalidēvan**=agaṇya-puṇya-varddhanakaran=**Ādināthan**=adhikaṁ śuchi **Śānti** negarṭte-vetta **Pārśvanum**=ivar=ātmajātar=ene **Kannana** vol kṛita-puṁṇyan=āvanō || [34*]

TRANSLATION.

(Verse 1.) Victorious be the commandment of the Lords of the Three Worlds, enjoined by the Jinas, bearing for token the blest supremely profound doctrine of (*different*) possibilities of predication.

(Lines 2-3.) Hail! the refuge of the whole world, favourite of Fortune and Earth, great Emperor, supreme Lord, supreme Master, ornament of **Satyāśraya's** race, embellishment of the **Chāḷukyas, Tribhuvanamalla-dēva**—

(Verse 2.) What emperors have completely torn up the roots of froward monarchs, scattered them with hurtling fling into the waters, stood up in the fore-front, and cleared the earth of thorns, right up to the (*surrounding*) ocean? A gem of emperors, the exceedingly puissant **Vikramāditya**, has cleared the earth of thorns and constantly protected it.

(Lines 4-5.) So, while the victorious reign of **Tribhuvanamalla-dēva** was advancing in a course of successively increasing prosperity, (*to endure*) as long as moon and stars :—

[1] See note on translation, below.

(Lines 5-8.) His younger brother—hail!—he who is praised by the whole world, renowned among men, scion of the **Pallavas**, darling of Fortune and Earth, heir-apparent, Paramēśvara [Supreme Lord] among kings, Mahēśvara [Great Lord] among warriors, adorned with valour, minion of the goddess of victory, guardian-gem to refuge-seekers, crest-gem of the **Chāḷukyas**, Triṇētra [Śiva] in the fray, purifying the Kshatriyas, a king of the Aṅgas [Karṇa] to fiery elephants, a natural Love-god, plunderer of hostile kings, champion of his elder brother, **Traiḷōkyamalla Vīra-Noḷamba Pallava-Permānaḍi Jayasiṁha-dēva**—

(Verse 3.) **Noḷamba**, a fatal discus against foemen's dominions, following the course of the series of primitive kings such as Naḷa, Nahusha, and Nṛiga, a crest-gem to the **Chāḷukyas**, a natural Love-god, whose feet are illumined by wreaths of lustre from numbers of gems adorning the heads of the crowd of bowing hostile monarchs, he whose enemies' hosts have fled—is he ordinary among kings?

(Lines 9-10.) Being known as a subject of such praise and distinction—

(Verse 4.) **Vīra-Noḷamba**, in whom are embodied the royal virtues, who has no foes remaining, towards whom the people's affection waxes great, the creeping-plant of whose glory stands erect, has hosts of foes bowing before him.

(Lines 10-11.) While he was protecting the **Two Three-hundreds**,[1] the **Banavāse Twelve-thousand**, the **Sāntaḷige Thousand**, and the **Kaṇḍūr Thousand** with enjoyment of pleasing conversations:—

(Lines 11-13.) One who finds sustenance at his lotus-feet, the Mahāsāmantādhipati who has obtained the five great musical sounds, great august General, setting arrows on the heads of foes, gallant to the lady the art of literature, bee to the lotus-face of Sarasvatī, he whose soul is matured by remembrance of Hara's feet adored (*by him*), a jewel in the ear of Sarasvatī, the High Minister, Steward of the Household, (*and*) General, **Eremayya**—

(Verse 5.) A Brahmā in all arts, a sun of the Brāhmaṇ race, a moon to the ocean of the Vatsa *gōtra*, a king Death to foes, is the General **Erega** a man of slight account in the series of worlds?

(Verse 6.) If the lord **Erega** has a resemblance (*to anything*) on earth, it is the earth, the ocean, (*and*) Indra's mountain[2] (*to which he may be compared respectively*) for weightiness, profundity, (*and*) solidity. (*But*), if one considers, the earth, which became tremulous through the Demons,[3] may become something different, the ocean, which had its profundity diminished by Rāma,[4] may become something different, the celestial mountain, which became light of weight through Kṛishṇa, may become something different, if sometime the case should happen.

(Verse 7) If one reflects, the distance between his merit and (*other*) illustrious men's merit may be said to be the distance between an elephant and a gnat; hence the sages' phrase "what envy is there for merits?" applies well to the lord **Erega**.

(Verse 8.) The creeping-plant of (*his*) goodly stainless glory has thus overspread the regions of space so that there is no gap; (*his*) valour has wrought . . .; (*his*) weightiness is beyond comparison; his conduct has reached a crowning degree; it has been such that they say "a son of strength[5] has again been born": who are able to praise (*adequately*) **Erega**'s eminence?

(Verse 9.) As he lives in such fame and repute; as (*his*) distinction, in which he is known as a sweet springtime to his land, continues to increase; as he enjoys the government of the

[1] Belvola and Puligere.

[2] Apparently Gōvardhana, which was lifted by Kṛishṇa.

[3] Cf. *Rig-vēda* II. xii. 2, X. xliv. 8, *Vedische Studien* i. 174.

[4] Namely when the *Sētu* or causeway was built from India to Ceylon.

[5] This phrase seems to be a version of the Vedic *sahasaḥ putra*.

Puligere Three-hundred while maintaining the high degree of his lord's fortunes, and holds a happy course transcending even Karṇa in generosity (*and*) truthfulness—the General Eṛega is of the same quality as Balin and Indra.

(Verse 10.) His younger brother **Dōṇa**, a seat of unbounded merit, a *bhuvana-bumbhuka*,[1] enjoying the fortunes of the Lord of the Gods [Indra], peerless in strength of arm, a (*God of the*) Flowery Arrows [Kāma] to the multitude of enemies' wives, has become eminent.

(Verse 11.) **Eṛega's** younger brother is in valour the younger brother of him who shattered the troop of the Kuru race [Arjuna], in incomparable beauty the younger brother of Baladēva [Kṛishṇa], in might of arm the younger brother of Yama's son [Bhīma].

(Verse 12.) When enemy kings are bowing at the base of **Eṛega's** feet, it is **Dōṇa** who makes them bow, so that their cry is "I cannot but bow"; he bears the burden of his lord's business, while the covetous and their like stoop (*before him*).

(Verse 13.) As there appears no grudging in (*his*) generosity, nor shortcoming in his worthy conduct, nor shame in his behaviour, are any other men in the world of mortals equal to **Dōṇa**, who is a (*God of the*) Flowery Arrows to women, a preserver of a multitude of agreeable cultured men, an expert in all arts equal to the Lotus-born [Brahman].

(Verse 14.) His deity is Paśupati, a supremely helpful lord; **Noḷamba**, conqueror of hosts of foes, has cherished and supported him; his father is **Tikka**, eminent for a series of brightest virtues; his mother is **Kalvāmbike**, adorned with brilliant conduct; his elder brother is the renowned **Eṛakapa**, a gem of the company of generals: thus **Dōṇa** is a dwelling-place for glory.

(Verse 15.) In this Iron Age, this time of stress, there has been an outcry[2] at the rise of an ocean of righteousness, so that it would seem as if the people of the earth altogether with one voice in their delight were joyously uttering praises, saying: "after a long time it has become visible, thus righteousness is coming to hand!"

(Verse 16.) Whilst Pushya of the year **Durmati**, the **sixth** in the series[3] of the years of **Vikrama** delightful in their course, the **dark fortnight**, and **Friday** and the **sixth** (*lunar*) **day** were in progress, while with these coincided a *mahā-yōga* consisting of *vyatīpāta*[4] and the great *uttarāyaṇa-saṁkrānti*, the excellent man **Dōṇa**, brilliant of fame, preserver of wide righteousness, here with generosity—

(Verses 17-18.) Having laved in this **Purikara**, a divine city, the feet of **Narēndrasēna Traividya**,[5] who is a moon to the ocean of the supreme Jinas' Church and a lotuses' friend [sun] in the sky of the **Sēna Gaṇa**, that mine of lustre sprung from the **Mūla Saṅgha**, who is a bridegroom of the goddess of white fame, a chief of worthy ascetics, one to whom monarchs bow down, a man without fault—

(Verse 19: identical with verse 8 of inscription A.)

(Line 30.) His senior disciple—

(Verse 20: identical with verse 9 of inscription A.)

(Verse 21.) "He has cherished Sarasvatī with delight of spirit; me he has despised; I do not exist while she is present—fie! to cohabit with a rival wife is hard!"—uttering these harsh words, swiftly mounting the elephant of the sky-quarter, Fame herself enviously reviles the worthy ascetic **Nayasēna Sūri**.[6]

(Line 30.) His senior disciple—

(Verse 22.) Ho! hurrah! is the great ascetic **Narēndrasēna**, the emperor of masters of

[1] See above, Vol. XIII, pp. 298, 327.

[2] Or, possibly, "elation."

[3] Properly *tati-shaṭka* means a series of six.

[4] The *yōga* when the declination of sun and moon is equal.

[5] Explained as "learned in *āgama*, logic, and grammar," *I. A.*, Vol. XIV, p. 23 n. The Jain "threefold lore" is elsewhere defined as *śabd-āgama*, *yukty-āgama*, and *param-āgama*.

[6] An example of the rhetorical artifice of *vyāja-stuti*.

the triple lore, something ordinary—he whose pair of lotus-feet is beaten by diadems of stooping sovereigns, he who is renowned, he who is a sun in peerless lustre, a mirror to the lotus-face of the lady Fame who is renowned (*as being bright as*) stars, pearl-strings, Hara's laughter,[1] ether, and frost, he who is an ocean of scriptural lore?

(Verse 23.) Because of the magnificence of (*his*) extraordinary sun-like character[2] owing to the presence of the majesty[3] of conquered foes (*appropriated by him*), because of (*his*) firm mind devoted to the grand and brilliant Jain religion, because of (*his*) peculiar quality of superlative splendour by which he is known as a sun in the sky of the Brāhmaṇ race, because of (*his*) supremacy in peerless might, because of (*his*) peculiar eminence in bounty, and because of (*his*) truthfulness, **Dinakara** (*was*) a mine of exceeding lustre, a heap of godliness.

(Verse 24.) As on the rise of the sun all darkness flees away, so with the rise of **Dinakara** the darkness of error flees away from the park of his race and is dissipated: what a wonder!

(Verse 25.) His sons **Rājimayya** and **Dūḍama** are illustrious over the whole earth as being renowned among men, bees to the Jinas' lotus-feet, possessed of culture.

(Verse 26.) All learned folk everlastingly praise lovingly with affection of spirit **Rāja**,[4] who is stainless and bright in brilliance, as being a bee to the Jinas' lotus-feet, gladdener of good men's souls, renowned over the whole earth, radiant with lustrous fame mounting to the tusks of the elephants of the sky-quarters, a tree of desire to cultured and agreeable men, exceeding in bounty to worthy recipients.

(Verse 27.) The world in unison always without cease rightly extols with gladness (?) of spirit (*and*) with affection **Rāja**, who is brilliant as the sun, a moon in golden hue,[5] a tree of desire to clients, calling him a lover of the worship of the Jinas according to the rules of the saint Manu's course, bountiful, peerless in brilliance, pure, full of kindness.

(Line 39.) If one would describe the measure of his beloved younger brother's valour—

(Verse 28.) At the stern command of the sovereign he took captive the Lord of the **Eighty-four**; in his boldness he clasped not his hands (*in submission*); he in his turn took captive in a most marvellous manner that same **Sōbhana** who in wrath had seized, bound, and cast into prison king **Inda**: is this singular degree of **Dūḍa's** valour an ordinary thing?

(Verse 29.) "By his might of arm he took captive him who had cast his master into confinement, and made him release him": thus this triple world lauds the valiant **Dūḍama**, scion of worthy Brāhmaṇs.

(Verse 30.) The excellent lady of **Dūḍa**, who has thus been described, far surpassed in beauty the Mind-born One's mistress [Rati]: despite this praise, men do not withal fully comprehend in any way **Ēchikabbe's** beauty.

(Verse 31.) So there was born to them **Hammikabbe**, comparable to a goddess, having locks of hair like troops of gadding bees, brilliantly distinguished, a wishing-gem to sages, a jewel of women.

(Verse 32.) This illustrious **Hammikabbe's** completely beloved husband, **Arasimayya**, comely as the Mind-born One, was distinguished in the world like Kānīna [Karṇa] here in respect of bounty.

(Verse 33.) The lady **Hammikabbe**, who was adorned with the ornaments of the merits of peerless bounty and virtue, and the most generous lord **Arasayya** had a son, the physician

[1] Cf. *Mēgha-dūta* 58.

[2] There is perhaps a play on *saurya* and *śaurya*, "valour." The name *Dinakara* means literally "sun."

[3] Literally, "heat." [4] *Rāja* means "moon"; hence the following epithet.

[5] *Gōja*, lit. "milk-born," may mean "moon," though I have never found it used in this derivative sense. Were it not for the context, I should be inclined to suggest *pasuge gōpanan*, "shepherd to his flock."

Kannapa, who was refined, a mine of excellence, skilled in the healing art, pre-eminent among good men: in view of this, as he was godly in his works, who has such righteousness accounted to him as Kanna?

(Verse 34.) Their sons are Indapa, a bee to the Jinas' lotus-feet, Īśvara, an ocean of noble virtue, Rāji, brilliant in refinement, the worthy Kalidēva, Ādinātha, an accumulator of incalculable merit, the exceedingly pure Śānti, (*and*) the distinguished Pārśva; hence who has such righteousness accounted to him as Kanna?

No. 10.—TWO KADAMBA INSCRIPTIONS OF NIRALGI.

By LIONEL D. BARNETT.

The village of **Niralgi**, whence these records come, lies in the Hāngal *tāluka* of Dhārwār District, in lat. 14° 52′ and long. 75° 18′, about 11½ miles to the north-east of Hāngal town. As our inscriptions shew, it was formerly called **Nīrili**. The ink-impressions on which the texts of the following inscriptions are based were prepared for the late Dr. Fleet, and are now in the British Museum.

A.—OF THE REIGN OF SOMESVARA I: SAKA 974.

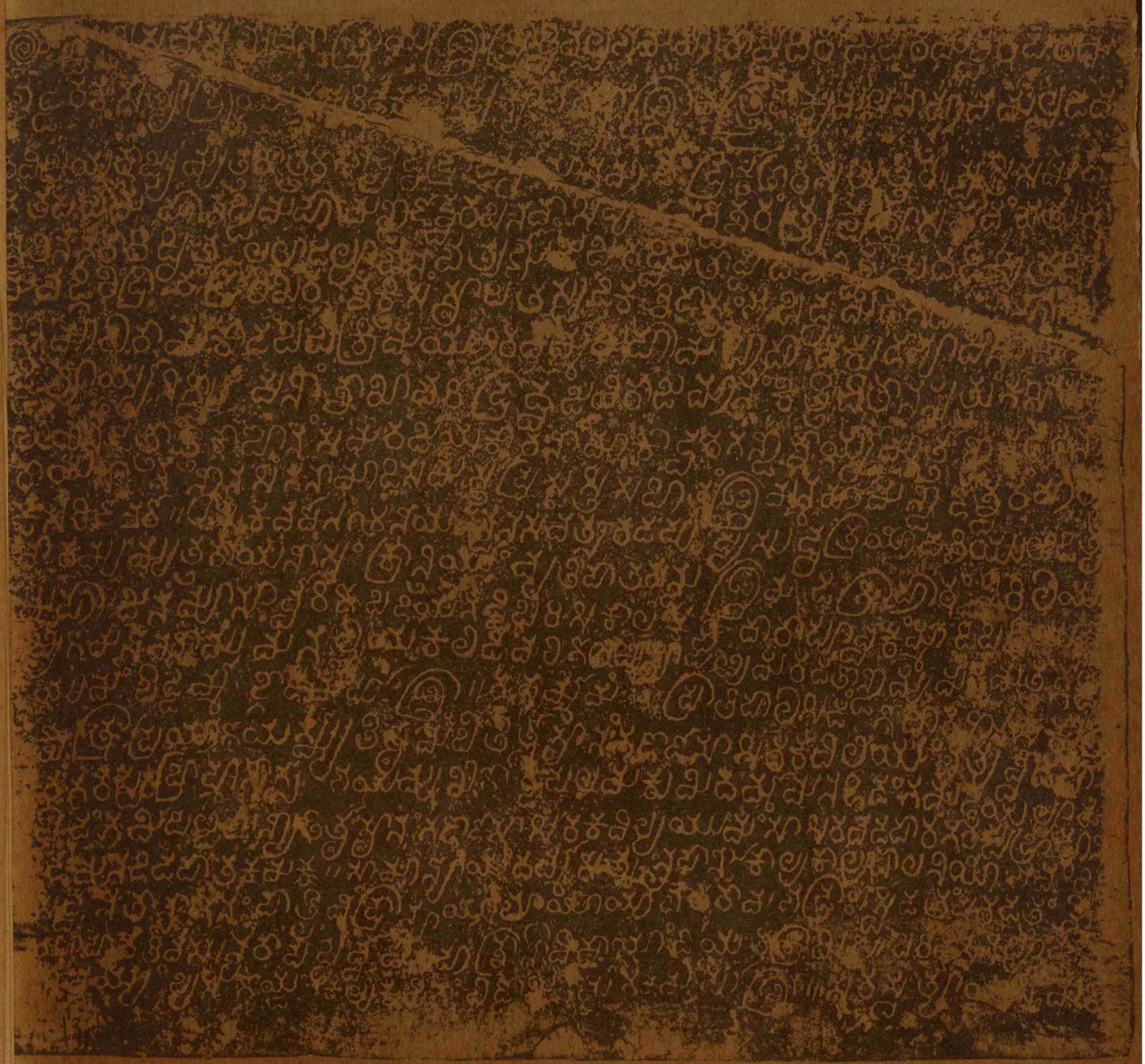
As to the exact site where this record was found and the character of the stone I have no information. The inscribed area is about 2 ft. high and 2 ft. 5½ in. broad.—The character is fairly good Kanarese of the period, with letters ½-¾ in. high. The palatal and the guttural nasals both occur: °*kāñchanaṁ* (l. 9), =*mmaṅgaḷa* (l. 15).—The language, except in the formal Sanskrit verses and final formulæ and the phrase *Sarasvatyāya namaḥ* (an error for *Sarasvatyai namaḥ*) in l. 22, is Old Kanarese prose. The *ḷ* is preserved in =*ggaḷdeyumaṁ* (l. 14) and *pēḷda* (l. 18); it is changed to *ḷ* in *baḷiyan* (l. 13), and *aḷi*° (ll. 17, 19). On the phrase *baḷiyan=aṭṭi* see Dr. Fleet's remarks above, Vol. XI, p. 3.

The record begins by referring itself to the reign of **Traiḷōkyamalla-Āhavamalla**, i.e. **Sōmēśvara I** (ll. 1-3), and then informs us that on a certain date the **Kādamba** Mahā-Maṇḍalēśvara **Harikēsarin** formally made over by deputy certain estates to the Three-Hundred Mahājanas of Nīrili for the maintenance of the Piriya Kere or Great Tank and the cult of the god Kali (ll. 3-15). The document was drafted by the town-clerk **Jōgivayya**, and engraved by **Chiṭṭōja** (ll. 21-22). Harikēsarin is the prince, also named **Arikēsarin** and **Hariga**, who figures in the Baṅkāpūr inscription of Śaka 977 published by me above, Vol. XIII, p. 168,[1] with titles almost the same as those given in the present record. I there stated (p. 169) that the year Śaka 977 marked the earliest known connection of the **Kādambas** with the **Banavāsi** province; we are now able to trace it back to a date three years earlier.

The date is given in ll. 11-12 as: Śaka 974 (expired), the cyclic year Nandana; Pushya śuddha 13; Sunday; the *uttarāyaṇa-saṁkrānti*; a *vyatīpāta*. This is irregular. In Nandana there was an intercalated Pushya. If we take the given *tithi* as belonging to the latter, it corresponded to **Tuesday, 5 January, A.D. 1053**, ending at 12 h. 19 m. after mean sunrise. Mr. R. Sewell, who has kindly checked my calculations in this paper, points out that the *tithi* śuddha 13 in Nija-Pushya of the same year was expunged: at mean sunrise on Wednesday, 3 February, A.D. 1053, the current *tithi* was śuddha 12, and at the same moment on the following Thursday the current *tithi* was śuddha 14. Furthermore, the *uttarāyaṇa-saṁkrānti* took place on **Wednesday, 24 December, A.D. 1052**, at 19 h. 23 m. after mean sunrise.

[1] In my translation of that document I have fallen into some errors, which I have tacitly corrected in my rendering of the present inscription.

Niralgi Inscription of the reign of Somesvara I: Saka 974.



F. W. THOMAS

SCALE ABOUT ONE-FOURTH

WHITTINGHAM & GRIGGS, COLL.

The only places mentioned are : Banavāsi (l. 4), the Agrahāra of Nīrili, i.e. Nīralgī (l. 12), the Piriya Kere or Great Tank (ll. 13-14), and the *tīrthas* (ll. 15-16).

TEXT.[1]

[Metres : v. 1, *Śālinī* ; v. 2, *Anushṭubh.*]

1 Svasti samasta-bhuvan-āśraya Śrī-Pri(pṛi)thvī-vallabha mahārāj-ādhirāja paramēśvara parama-

2 bhaṭṭārakaṁ Satyāśraya-kuḷa-tiḷakaṁ Chāḷuky-ābharaṇaṁ śrīmat-Traiḷōkyamallan=Āhavamalla-dēva-

3 ra vijaya-rājyam=uttarōttar-ābhivṛiddhi-pravarddhamānam=ā-chaṁdr-ārkka-tāraṁ salutt-ire || Svasti samadhi-

4 gata-paṁcha-mahā-śabda-mahāmaṇḍaḷēśvaraṁ Banavāsi-puravar-ēśvaraṁ Tryaksha-kshmā-saṁbhavaṁ chaturā(ra)-

5 śīti-nagar-ādhishṭhita Lalāṭalōchana-Chaturbhbhuja-jagad-vidit-āshṭādaś-āśvamēdha-dīkshita Hi-

6 mavad-girīṁdra-ruṁdra-śikhara-śakti-saṁsthāpita spḥaṭika-śiḷā-staṁbha-baddha-mada-gaja mahā-ma-

7 him-ābhirāma Kādaṁba-chakri-Mayūravarmma-mahā-mahīpāḷa-kuḷa-bhūshaṇaṁ permma-

8 ṭṭi-tūryya-nirgghōshaṇaṁ śākhācharēṁdra-dhvaja-virājamānaṁ kīrtti-vitānan=uttuṁga-siṁhā-

9 lāṁchchhanaṁ datt-ārtti(rtthi)-kāñchanaṁ samara-jaya-kāraṇaṁ mār-kkoḷvara gaṇḍa śauryya-mārttaṇḍan=adaṭa-Nā-

10 rāyaṇan=aṇṇana siṁga nām-ādi-samasta-prasa(śa)sti-sahitaṁ śrīman-mahāmaṇḍaḷēś-śvaraṁ Hari-

11 kēsari-dēvar || Sa(śa)ka-varsha 974neya Nandana-saṁvatsarada Pushya-su(śu)ddha trayōdaśiyuṁ Āditya-

12 vāramum=uttarāyaṇa-saṁkrāntiyuṁ vyatīpātadandu śrīmad-agrahāraṁ Nīriliya

13 mahājanaṁ mūnūrvvarige baḷiyan=aṭṭi barisi kāḷaṁ karchchi dhārā-pūrvvakaṁm=māḍi Piriya Ke-

14 ṛege mane-vaṇamuman=alliya Kali-dēvarige aṛunūṛu marada tōṇṭamumaṁ mattar=ggaḷḍe-

15 yumaṁ . biṭṭar=mmaṁgaḷa mahā-śrī || Ī dharmmamaṁ pratipāḷisidaṁge Vāraṇāsi Kuru-

16 kshētra Prayāgey=Argghyatīrttham=emb=ī tīrttha-sthānaṁgaḷoḷ sāsira kaviḷeyaṁ chatur-vvēda-pā-

17 ragar=appa[2] brāhmaṇargg=ubhayamukhi goṭṭa pa(pha)lam=akkum=Ī dharmmaman=aḷidaṁgam=aḷiyal=ōḍa-

18 rchchidaṁgam=ī pōḷda puṇya-tīrttha-sthāṇaṁgaḷoḷ sāsira kaviḷeyumaṁ sāsira vēda-pāragar=appa brāhmaṇa-

19 ḷa(ru)man=aḷida pātakam=akku || Sāmānyō=yaṁ dharmma-sētuṇ(r)=nṛipāṇā[ṁ*] kālē kālē pālanīyō bhavadbhiḥ [|*]

20 sarvvān=ētān=bhāginaḥ pārtthivēṁdrān=bhūyō bhūyō yāchatē Rāmabhadraḥ | (||) [1*] Sva-datt[ā*]ṁ para-datt[ā*]ṁ vā

[1] From the ink-impression.

[2] The engraver has made after this word a *ra*, squeezed in between *ppa* and *brā*.

21 yō harēti(ta) vasundharā[ṁ*] [|*] shashṭhi(shṭi)r=vvarsha-sahasrā(srā)ṇi
vishṭā(shṭhā)yāṁ jāyatē kri(kṛi)miḥ || [2*] Baredaṁ sēnabōva Jō-
22 givayyaṁ besa-geydam kalukuṭigaṁ Chiṭṭōjaṁ | maṁgaḷa mahā-śrī ||
Sarasvatyāya namaḥ

TRANSLATION.

(Lines 1-3.) While the victorious reign of—hail!—the asylum of the whole world, favourite of Fortune and Earth, great Emperor, supreme Lord, supreme Master, ornament of Satyāśraya's race, embellishment of the Chāḷukyas, king Traiḷōkyamalla-Āhavamalla, was advancing in a course of successively increasing prosperity, (*to endure*) as long as moon, sun, and stars;—

(Lines 3-11.) Hail! The Mahā-Maṇḍalēśvara who has obtained the five great musical sounds, who bears all titles of honour such as "lord of Banavāsi best of cities, ornament of the race of the Kādamba emperor the great king Mayūravarman, which is sprung from the Three-eyed [Śiva] and Earth, presides over eighty-four cities, is consecrated in eighteen world-famous horse-sacrifices to (*the god of*) the Frontal Eye [Śiva] and the Four-armed [Vishṇu], has established its might upon the massive summits of the great Mount Himavat, binds its fiery elephants to columns of crystal, and is charming with great majesty,—he who is (*attended*) with the noise of *permaṭṭi* drums and (*other*) musical instruments, who is resplendent with a banner (*bearing the device*) of a great ape, is canopied in glory, and has for crest a stately lion; giver of gold to the needy, cause of victory in the fray, man of might to adversaries, sun of valour, a Nārāyaṇa of the gallant, a lion for his elder brother"—the Mahā-Maṇḍalēśvara Harikēsari-dēva,—

(Lines 11-12.) On Sunday, the thirteenth of the bright fortnight of Pushya in the cyclic year Nandana, the 974th (*year*) of the Śaka era, at the *uttarāyaṇa-saṁkrānti*, in a *vyatīpāta*,[1]—

(Lines 12-15.) Having sent a summoner to the Three-hundred Mahājanas of the Agrahāra of Nīrili, convened them, and laved their feet, made over with pouring of water the house-tax to the Great Tank, and a garden of six-hundred trees and a field of one *mattar* to the god Kali of that place. Happiness! great fortune!

(Lines 15-19: a prose commonitory formula of the usual type.)

(Verses 1-2: two common Sanskrit verses.)

(Lines 21-22.) The town-clerk Jōgivayya wrote (*this record*). The stone-mason Chiṭṭōja executed the order. Happiness! great fortune! homage to Sarasvatī!

B.—OF THE REIGN OF SOMESVARA II: SAKA 996-7.

In the case of this epigraph also I have been unable to trace the site whence it comes, or to find any details as to the stone. The inscribed area, which is much worn by weather, comprises an upper compartment, on which are lines 1-2, and a lower one containing all the rest; it is nearly 4 ft. high and 2 ft. 7½ in. wide.—The character is Kanarese, rather straggling and clumsy, and resembling the Peggūr inscription of A.D. 978 (no. 4 of "*Coorg Inscriptions*," revised edition). The cursive forms of *m*, *y*, and *v* (above, Vol. XII, p. 335) are all found here:—*m* in °*baḷamaṁ* and (?) *brīḍyatvamaṁ*, l. 22, *maṁḍaḷika*°, l. 24, *śrīman*°, l. 33, *dharmma*°, ll. 37, 39, *kavileyumaṁ*, ll. 39-40, °*pātakam*, l. 40, *Rāma*°, l. 41; *y* in °*saṁkrāntiyaṁdum*, ll. 31-32, *Uṁchagēriya*, l. 32; and *v* in *neṛevare*, l. 23. The *ñ* is written in *paṁñcha*°, ll. 30, 38, 40. The height of the letters varies from ⅜ in. to ⅝ in.—The language is Old Kanarese, except

[1] A *yōga* in which the declinations of sun and moon are equal.

in the Sanskrit verses on ll. 40-42 and the barbarous concluding formula. The archaic *ḷ* occurs once, in *pēḷḍa*, l. 39; it is replaced by *ḷ* in *baḷi°*, ll. 10, 33, *baḷiya*, l. 36, *aḷi°*, ll. 39-40, and by *r* in *mēl-ārkeyya*, l. 13 (a blunder for *°āḷkeya*) and *ērppattaṛa*, l. 32. In regard to lexicography, we may notice *baḷiyan=aṭṭi*, l. 10, and *baḷiy-aṭṭi*, l. 33 (see above, inscr. A.), *māṇp=*, l. 22, (?) *tott=*, l. 22, (?) *brīḍyatva*, l. 22, *poḷisiṁ*, l. 23 (perhaps connected with *poḷe*, "to shine" or "to be swung about": should we then read here *poḷepiṁ* ?), and *avaṁguṁṭe*, l. 28 (in Kittel's Dictionary *avaṅgōṭa*).

The record is twofold, comprising two endowments, and probably was engraved at the time when the second was granted. The first (ll. 1-13) opens by referring itself to the reign of a Chāḷukya king whose name is here lost; but that it was **Bhuvanaikamalla (Sōmēśvara II)** is proved by the reference to him and the date in l. 8. It then mentions (ll. 3-5) the Mahā-Maṇḍalēśvara **Vikramāditya-dēva** (possibly the king's younger brother, afterwards Vikramāditya VI), and likewise (ll. 5-7) a noble of the **Pallava** lineage named **Bhuvanaikamalla-Pallava-Permānaḍi Vi[shṇuvardhana-Vi]jayāditya**,[1] and bearing among his other titles that of "**lord of Kāñchī best of cities**"; and it states that, when Vikramāditya and Vishṇuvardhana-Vijayāditya were at **Baṅkāpura** in the course of a tour of state in the service of king Bhuvanaikamalla, in Śaka 996, they granted the village of Basalūr, in the Elambi Twenty, to the 300 Mahājanas of Nīrili for the maintenance of the cult of Rāmēśvara (a well-known form of Śiva) at Pomballi (ll. 7-13).

Then comes the second record (ll. 13-43). It begins by introducing, in prose, with the usual titles of his lineage and some others, the **Kādamba** Mahā-Maṇḍalēśvara **Śāntivarman**, "**lord of Banavāsi best of cities**" (ll. 13-21), and extols his valour and glory in four verses (ll. 21-30). After this comes the formal statement that in Śaka 997, when at **Uñchagēri**, he, in concert with two other high officers of state, renewed the grant of the first record (ll. 30-42).[2] **Bichchara Gaṅgayya** made the fair copy, and **Sūdōja** engraved it (ll. 42-43).

There are two dates. The first is given on ll. 8-9 as: Śaka 996, Ānanda; the full-moon of Āśvayuja; an eclipse of the moon. This seems to be regular. The *tithi* mentioned was current at sunrise on **Tuesday, 7 October, A.D. 1074**, and ended about 20 h. 3 m. after mean sunrise (for Ujjain). On that day there was a lunar eclipse, in which total obscuration began 19 h. 30 m. after mean sunrise, while the above *tithi* was still current.

The second date is given on ll. 31-32 as: Śaka 997, Rākshasa; Pushya śuddha 1; Sunday; the *uttarāyaṇa-saṁkrānti*. This is quite wrong. Pushya śuddha 1 of given year corresponded to **Friday, 11 December, A.D. 1075**, on which it ended about 11 h. 15 m. after mean sunrise. The *uttarāyaṇa-saṁkrānti*, on the other hand, occurred on **Thursday, 24 December**, about 18 h. after mean sunrise, so that Friday was reckoned as the first day of Makara.

The places mentioned are: **Kāñchī** (ll. 6, 7); the *nele-vīḍu* of **Baṅkāpura** (l. 8); **Pomballi** (ll. 10, 35); the **Pānuṅgal Five-hundred** (l. 12); the **Elambi Twenty** (ll. 12, 36); **Basalūr** (*ib.*); **Banavāsi** (ll. 18, 30); the *nele-vīḍu* of **Uñchagēri** (l. 32); and the *tīrthas* (l. 37), besides a rather obscure phrase *nāḍ=ērppattaṛa* (l. 32), which is perhaps a mistake for *nāḍ=irppattaṛa*, "the Twenty of the county," viz. Elambi. Pomballi is the modern Hombli, lying 3½ miles nearly south of Nīralgi, in lat. 14° 49½′ and long. 75° 17½′. One is tempted to identify Uñchagēri with the modern Wunchigēri, near Kumtā; but the distance from Nīralgi is considerable. Kāñchī (Conjeevaram), Baṅkāpura (Baṅkāpūr), and Pānuṅgal (Hāngal) are well known. Elambi and Basalūr do not seem to be traceable.

[1] See *Dyn. Kanar. Distr.*, p. 444 and n. 1.

[2] See *Dyn. Kanar. Distr.*, p. 561.

TEXT.[1]

[Metres: vv. 1, 3, 4, *Mahāsragdharā*; v. 2, *Champakamālā*; v. 5, *Śālinī*; v. 6, *Anushṭubh*.]

1 Śrī Svasti samasta-bhuvan-āśraya Śrī-Pri(pṛi)[thvī-vallabha mahārāj-ādhirāja paramēśvara parama-bhaṭṭārakaṁ]

2 Satyāśraya-[kuḷa-tiḷakaṁ Chāḷuky-ābharaṇaṁ śrīmad-Bhuvanaikamalla-dēvara rājyam=uttarōttar-ābhivṛiddhi-pravarddhamānam=ā-chaṁdr-ārkka-tāraṁ]

3 baraṁ saluttam-ire || Tatu-pāda-padum-ōpajīvi || Svasti samadhigata-paṁcha-mahā-śa-

4 bda-mahāmaṇḍaḷēśvaraṁ Gaurī-Gaṇēy(ś)-āvatāraṁ Pārvvatī-priyaṁ * * * * * kāvanaṁ nām-ā-

5 dhi(di)-samasta-prasa(śa)sti-sahitaṁ śrīman-mahāmaṇḍaḷēśvaraṁ **Vikra[māditya-dēva]r** || Svasti samasta-

6 bhuvan-ōrlla(lla)sita-vīra-Pallav-ānvayaṁ Śrī-Pri(pṛi)thvī-vallabhaṁ **Palla[va * * * * *]**n=amōgha-vākyaṁ **Kāṁ-**

7 **chī-puravar-ēśvaraṁ śrīmad-Bhuvanaikamalla-Pallava-Permmānaḍi(ḍi) Vi[shṇuvardhana(?)-Vi]jayādityanum=irddu** śrī-

8 matu-**Bhuvanaikamalla-dēvargge Baṁkāpurada** nele-vīḍinoḷ bi[jayaṁ-geydu(?)] **Śaka-variśa**[2] **999neya**

9 **Ānaṁnda-saṁvatsarada** Āśvayujada puṇṇive sōma-grahaṇadaṁ[du śrīmad]-agrahāraṁ **Nīriliya** mahā-

10 janaṁ mūnūrvvarumaṁ baḷiyan=aṭṭi barisi kālaṁ karchchi dhārā-pūrvvakaṁ māḍi **Poṁbaḷḷiya** tīrtthada

11 śrī-Rāmēśvara-dēvara snāna-nivēdyakkaṁ gandha-dhūpakkaṁ naṁndā-dīvigegaṁ maṭhaṁnta[3]-Si(Śi)va-paṇḍitarggaṁ bhrā(brā)hma-

12 ṇarggaṁ chchhatrakkaṁ **Pānuṁgall=aynūṛada** kaṁpaṇaṁ **Elaṁbiy=irppattaṛa** baliya bāḍaṁ **Basalū-**

13 ra[ṁ] mēl-ārkke(ḷke)ya sarvv-ābhyaṁntara-sidhdhiyiṁ biṭṭu koṭṭar || ☙ || Svasti samasta-kula-mahīdha-

14 ra-chakravartti-[mahā*]-mahima-Himavad-girīṁdra-ruṁdra-śikhara-saṁsthāpita-mahā-śakti-prabhāvaṁ **Ka-**

15 ḍa(da)ṁba-kuḷ-āṁbara-prachaṁṇḍa-mārttaṇḍan=anēka-samara-samaya-samudita-nija-bhuja-vijay-ōpā-

16 rjjita-vīra-lakshmī-nivāsa-maṁḍita-prachaṁṇḍa-dōr-ddaṁṇḍa[ṁ] baḷavad-ari-kuḷa-Kāḷ-ānalaṁ pratāpa-pra-

17 kōp-ōpēta[ṁ*] Lalāṭalōchanaṁ(na)-jagad-vidit-āshṭādaś-āsva(śva)mēdha-dīkshā-dīkshita-kuḷa-prasūtaṁ chaturā(ra)śiṭy-nagar-ādhi-

18 shṭi(shṭhi)ta viśishṭa-Banavāsi-puravar-ādhīśvaraṁ **Kaḍa(da)ṁba-kaṁṭhīravaṁ Kāḍa(da)ṁba-chakri-Mayūravarmma-mahā-mahīpā-**

19 ḷa-kula-bhūshaṇaṁ permaṭṭi-tūryya-nirgghōśa(sha)ṇaṁ śākhāchārēṁndra-dhvaja-virājamāna[ṁ] mān-ōttuṁga-siṁha-lāṁcha(chha)naṁ datt-ā-

20 rtti(rtthi)-kāṁchanaṁ mār-kkoḷvaṁ gaṇḍaṁ samara-mārttaṁṇḍaṁ raṇa-vijaya-karaṇan=aṇṇana gaṁndha-vāraṇaṁ nām-ādi-samasta-praśasti-

21 sahitaṁ śrīman-mahāmaṇḍaḷēśvaraṁ **Sā(śā)ntivarmma-dēvar** || Balavadu-vidvishṭa-bhūpāḷakar=aḍiġ=eṛagi śaraṇuṁ-b[ō]g[e][4] du-

---

[1] From the ink-impression.

[2] Read *Śaka-varsha*.

[3] Read *maṭhastha-*. [*maṭh-ānta* will do equally well.—H. K. S.]

[4] Either *aḍiġe* or *eṛagi* may be read, but not both; and we should correct *śaraṇuṁ* to *śuraṇ*.

22 rvvāra-bāhā-balamaṁ māṇp[1]=eṁdhu(du)daṁ tott=aḷ[u*]ki baḷ[u*]ki brīḍyatvamaṁ
pūṇdar=oṁdaṁd=elelē mīṛalu kaḍaṁgal=toḍaral=eḍaṛal=oṭṭaysal=ukka-
23 l=palaṁchal poḷisiṁ[2] māṛ-āṁtu kādal neṛevare dhuradoḷ dēva **Kādaṁba-Rudrā** ||
[1*] Baḷavad-arāti-maṁṇḍaḷika-gaṁḍa-lay-āṁtaka Śāṁ-
24 nta-bhūpa maṁḍaḷika-lalāma maṁḍalika-Bhairava maṁḍaḷika-Triṇētra maṁḍaḷika-
gharaṭṭa maṁḍalika-mauḷi-vighaṭṭita-pā-
25 da-pīṭha maṁḍaḷika-lalāṭa-paṭṭa ninag=ār=ddore maṁḍaḷikar dharitriyoḷu || [2*]
Baḷavat-kōp[3]-āgniyiṁd=āṁnt=ahitaran=elelē
26 kolvudaṁd=irkke bāhā-baḷadiṁd=ammamma dik-pāḷaran=aḷ[u*]kisal=aṁdridhramaṁ[4]
chāḷisal bhūtaḷam=aṁtuṁ kaṁpisalu dī(di)g-ga-
27 jaman=aḷaṛisal vārddhiyuṁ śōshisalk=ē[5] chaḷamō pēḷ sālanē tat-kshaṇadoḷe
muḷidaṁd=ōho **Kādaṁba-Rudraṁ** || [3*] Kaḍupiṁ-
28 daṁ dēva niṁnn=ōr biḍad=oḍa(da)ṛuv=avaṁguṁṭe śūḷaṁ kapāḷaṁ koḍe
khaṭvāṁgaṁ pināka ṁ poḷeva nosala kaṇ hasti-charmmaṁ śir-ō-
29 dyadriḍ[6] vaṁdr-ābhūḷa-bhūt-āvaḷi kaṛe-koral=arddh-āṁgadoḷu Gauri pempaṁ
paḍed=arddh-ēṁndu-prabhā-bhāsura-vikaṭa-jarā(ṭā)-jūṭa-kōṭī-
30 viṭaṁkaṁ || [4*] Svasti samadhigata-paṁñcha-mahā-śabda-mahāmaṁṇḍaḷēśvaraṁ
Banavāsi-puravar-ādhīśvaraṁ śrīman-mahāmaṁṇḍaḷēśva-
31 raṁ **Śāṁntivarmma-dēvar Śakha(ka)-varsha 997neya Rākshasa(sa)-
saṁvatsarada Puśya(shya)-su(śu)ddha pāḍiva Ādi-vāramuṁm**=uttarāyaṇa-saṁkrā-
32 ntiyaṁdum=ū(ā)gal nāḍ=ē[r*]ppattaṛa[7] baḷiya **Uṁchagēriya** nele-vīḍinal=irddaṁdu
śrīmad-agrahāraṁ **Nīriliya** mahājanaṁ mū-
33 nūrbbarumaṁ baḷiy-aṭṭi barisi śrīman-mahāmaṁṇḍaḷēśvaraṁ **Sā(śā)ṁntivarmma-
dēvaruṁ** mahā-pradhānaṁ piriya perggaḍe daṁṇḍanāya-
34 kav=I(ī)śvaram[m]ayyanuṁ mahā-pradhānaṁ perggaḍe **Śōbhanayyanum**=iṛddu[8]
kālaṁ karchchi dhārā-pūrvvakaṁ māḍi śrīmat-
35 **Pombaḷḷiya** tīrtthada śrī-Rāmēśvara-dēvara aṁga-bhōgakkaṁ dēvaraṁ pūjisuva
brahmachārigaḷgaṁ pannirvvaruṁ
36 brāhmaṇargga[ṁ] chhatrakkaṁ **Elaṁbiy=irppattaṛa** baliya bāḍaṁ **Basalūraṁ**
pravishṭam=āgi sarvv-ābhyaṁntata(ra)-siddhiyiṁ biṭṭu ko-
37 ṭṭaru || Ī dharmmamaṁ pratipālisidaṁge Vāraṇāsi Kurukshētra Prayāge
Arghyatīrttham=eṁb=ī tīrttha-sthānaṁgokoḷ[9] sā-
38 sira kavileya kōḍuṁ koḷagumaṁ paṁñcha-ratnaṁgaḷoḷu kaṭṭisi
sāsirvvar=vvēda-pāragar=appa bhra(brā)hmaṇargg=ubhayamu-
39 khi-goṭṭa phalam=akkuṁ || I(ī) dharmmaman=aḷidaṁgam=aḷiyal=oḍarchchidaṁgam=ī
pēḷda puṇṇya-tīrtha-sthānaṁg[aḷ*]oḷu sāsira kavi-
40 leyumaṁ sāsirvvar=vvēda-pāragar-appa brāhmaṇaruman=aḷida paṁñcha-mahā-
pātakam=akku[ṁ] || Sāmāṇyō=yaṁ dharmma-sētaṇ(tur)=nṛii(nṛi)-
41 pāṇāṁ kālō kālē pālanīyō bhavadbhiḥ [|*] sarvvān=ētān=bhāginaḥ pārtthivēṁndrān
bhūyō bhūyō yāchatē Rāmabhadraḥ [||* 5*]
42 Sva-datt[ā*]ṁ para-datt[ā*]ṁ vā yō hareti(ta) vasuṁndharāṁ [|*] shashṭir=vvarsha-
sahaśrā(srā)ṇi viṣṭā(shṭhā)yāṁ jāyatē kri(kṛi)miḥ || [6*] Baredaṁ **Bichchara**
43 **Gaṁgayyaṁ** ¦ besa-geydaṁ kalukuṭiga **Sūdōjaṁ** [||*] Maṁgaḷa mahā-śrī ||
Sarasvatyāya namaḥ

---

[1] The *p* is not certain: it may be *v*.
[2] Perhaps a mistake for *poḷepiṁ*; see above.
[3] Written separately, as *baḷavat kōp-*.
[4] Read *adrīṁdramaṁ*.
[5] Written separately, as *śōshisal k=ē*.
[6] Apparently to be corrected to *-ōdyaj-jaḍe*.
[7] See above.
[8] Or possibly *iṛldu* i.e. *iḍdu*.
[9] Read *-sthānaṁgaḷo-*.

TRANSLATION.

(Lines 1-3.) Fortune! While the reign of—hail!—the asylum of the whole world, [favourite] of Fortune and Earth, [great Emperor, supreme Lord, supreme Master, ornament] of **Satyāśraya's** [race, embellishment of the **Chāḷukyas**, king **Bhuvanaikamalla**,] was advancing [in a course of successively increasing prosperity, (*to endure*) as long as moon, sun, and stars] :—

(Lines 3-5.) When he who finds sustenance at his lotus-feet,—hail!—the Mahā-Maṇḍalēśvara who has obtained the five great musical sounds, having all titles of honour such as "incarnation of Gaurī and Gaṇēśa (?), beloved of Pārvatī, protection . . ." the Mahā-maṇḍalēśvara **Vikramāditya-dēva**,—

(Lines 5-8.) Likewise—hail!—the scion of the heroic **Pallava** race illustrious over the whole world, favourite of Fortune and Earth, . . . of the **Pallavas**, unfailing in speech, **lord of Kāñchī best of cities, Bhuvanaikamalla-Pallava-Permānaḍi Vishṇuvardhana (?)-Vijayāditya**, in concert (*with him*), having made a tour of state for king **Bhuvanaikamalla**, at the standing camp[1] of **Baṅkāpura**,—

(Lines 8-13.) **On the full-moon day of Āśvayuja in the cyclic year Ānanda, the 996th** (*year*) **of the Śaka era**, during an eclipse of the moon, having sent a summoner and convened the Three-hundred Mahājanas of the Agrahāra of **Nīrili** and laved their feet, made over with pouring of water **Basalūr**, a town belonging to the **Elambi Twenty**, a county of the **Pānuṅgal Five-hundred**, with full internal authority of higher administration, for the baths and oblations of the god Rāmēśvara of the sanctuary of **Pombaḷḷi**, for scents and incense, for perpetual lamps, for the learned men of (*the cult of*) Śiva resident in the monastery, for the Brāhmaṇs, and for the charity-hall.

(Lines 13-21.) Hail! The Mahā-Maṇḍalēśvara **Śāntivarma-dēva**, who bears all titles of honour such as "he whose puissance of great might is established upon the massive summits of the great Mount Himavat mighty of majesty, the emperor of all central mountains; a magnificent sun in the sky of the **Kadamba** race; he whose awful rod-like arm is adorned by the residence of heroes' Fortune won by the victories of his arms uplifted on the occasion of many a fray; a fire of Doom to potent foemen's races; inspired with majesty and wrath; sprung from the lineage consecrated in the consecratory rites of eighteen world-renowned horse-sacrifices to (*the God of*) the Frontal Eye; presiding over eighty-four cities; lord of that best of cities the peculiarly excellent **Banavāsi**; lion of the **Kadambas**; ornament of the race of the **Kādamba Emperor**, the great king **Mayūravarman**; he who is (*saluted*) with the noise of *permaṭṭi* drums and (*other*) musical instruments, who is resplendent with a banner (*bearing the device*) of a great ape, who has for crest a lion stately in pride; giver of gold to the needy, man of might to adversaries, sun in battle, cause of victory in the fray, furious elephant for his elder brother":—

(Verse 1.) When puissant hostile monarchs come bowing at his feet for refuge,[2] in fear and terror of his irresistible might of arm yearning for the word "stop," they confess their shame: at once, aha! as they swell in pride, put forth effort, become arrested, bend, contract themselves, boil in rage, strike in resistance, confronting (*thee*)[3] . . . will they be able to contend in the fray, O Rudra of the **Kādambas**?

(Verse 2.) O king **Śānta**, thou Death-spirit of cosmic dissolution to warriors of puissant enemy princes, ornament of princes, Bhairava to princes, Triṇētra [Śiva] to princes, grindstone to princes, thou whose footstool is rubbed by princes' crests, thou frontal diadem of princes, what princes on earth are like to thee?

[1] See *J.R.A.S.*, 1917, p. 117. [2] See on text, above. [3] See above.

(Verse 3.) When, confronting foes with the fire of his puissant wrath, aha! he is slaying them; when by the might of his arm, hurrah! he terrifies the Guardians of the Spaces, moves great mountains, shakes the whole earth, brings dread upon the elephants of the spaces, dries up the ocean, what high spirit! Say, ho! is not the Rudra of the **Kādambas** instantly effective in his wrath?

(Verse 4.) In thy pride, O king, thou hast, with not a single one of them lacking, (*Śiva's*) brandished sword, pike, skulls, parasol, *khatvāṅga*-club, trident, gleaming frontal eye, elephant-hide, high mass of hair on the head, troops of fearful goblins as votaries, black throat, Gaurī occupying half of (*Śiva's*) body, and (*hair dressed in the shape of*) a dovecot on the top of wondrous matted tresses radiant with the lustre of the half-moon who has obtained eminence.

(Lines 30-33.) Hail! the Mahā-Maṇḍalēśvara who has obtained the five great musical sounds, lord of **Banavāsi** best of cities, the Mahā-Maṇḍalēśvara **Śāntivarma-dēva**, on **Sunday**, the **first of the bright fortnight of Pushya** in the cyclic year **Rākshasa**, the **997th** (*year*) of the **Śaka era**, on the *uttarāyana-saṁkrānti*, when he was at the standing camp of **Uñchagēri** in the Seventy (?) of the county, having sent a summoner and convened the Three Hundred Mahājanas of **Nīrili**,—

(Lines 33-37.) The Mahā-Maṇḍalēśvara **Śāntivarma-dēva**, and the high minister, senior controller, (*and*) general **Īśvarammayya**, and the high minister (*and*) controller **Śōbhanayya** in concert, having laved the feet (*of the Mahājanas*), made over with pouring of water **Basalūr**, a town belonging to the **Elambi Twenty**, inclusively with full internal authority, for the personal enjoyment of the god Rāmēśvara of the sanctuary of **Pombaḷḷi**, for the celibates and the twelve Brāhmaṇs worshipping the god, and for the charity-hall.

(Lines 37-40: a prose formula of the usual type.)

(Verses 5-6: two common Sanskrit metrical formulæ.)

(Lines 42-43.) **Bichchara Gāṅgayya** wrote (*the grant*); the stone-mason **Sūdōja** executed the order. Happiness! great fortune! Homage to Sarasvatī.

No. 11.—THREE INSCRIPTIONS FROM HOTTUR

By Lionel D. Barnett.

Hoṭṭūr—or, to give it its ancient name, Poṭṭiyūr—is a village in the Baṅkāpūr *tāluka* of Dhārwār District, lying in lat. 14° 56′ and long. 75° 16′, some three miles nearly due south from Shiggaon. The ink-impressions from which the following inscriptions have been edited by me were prepared for the late Dr. Fleet, and are now in the possession of the Trustees of the British Museum.

A.—OF THE REIGN OF SATYASRAYA: SAKA 929.

This inscription is cut upon a rectangular block, divided into six horizontal bands, and surmounted by a stepped top; I can find no record of the site where it stands, or stood. The stone is a *vīragal*, with sculptures of the usual type: in the uppermost compartment, a seated god with a fan-bearer on each side; below this, lines 1-6 of the inscription; below this, the hero being carried up to heaven by deities, one on each side; below this, lines 7-12 of the inscription; below this, a battle-scene, representing in the centre the hero with a bow, facing to the proper left and shooting against two archers, while a third man is falling pierced with

arrows at his feet, and six cows stand behind him; below this is the base.[1] The width of the inscribed bands is about 2 ft. 5 in., and their height about 6½ in. They are very much worn, and parts—happily not material—are quite broken away.—The **character** is Old Kanarese of the period, rather clumsy and irregular. The height of the letters varies generally between ½ in. and ¾ in. The cursive *y* appears in °*chayaṁgaḷa*[*ṁ*], l. 5, and °*gēriya*, l. 12 (see above, Vol. XII, p. 335).—The **language** is Old Kanarese prose. Original *ḻ* is preserved, and sometimes *ḻ* is wrongly written for *ḷ*. The words *taḻaṟaṁ*, l. 9 (see above, Vol. XVI, p. 80), and *eḷtu* (*eḻtaṁ*, l. 10, and *eḻtige*, l. 11), the source of the modern *ettu*, are deserving of notice.

The **record**, after giving the date (l. 1), describes in detail an invasion by the **Chōḻa** king, whom it styles **Rājarāja Nitya-vinōda Rājēndra-vidyādhara Nūrmaḍi-Chōḻa** (ll. 1-3). This evidently refers to **Rājarāja I**, who was reigning at the time, and bore the title of Nitya-vinōda (*South-Ind. Inscr.*, Vol. II, pp. 151, 260 n., 301). It then relates his defeat by the **Chāḷukya Akaḷaṅkacharita-Iṟivabeḍaṅga Satyāśraya**, and the latter's triumphal progress through the south (ll. 3-6). While Satyāśraya in the course of this campaign was at the *ghaṭṭa* of Tāvare (see *Dyn. Kan. Distr.*, p. 433), and certain persons, whose names are lost, were acting as *gāvuṇḍas* of the *nāḍu* and the town of Poṭṭiyūr respectively, a raid was made by robbers upon the oxen belonging to the betel-traders, and the beadle **Gojjiga** perished in a valiant attempt to save them. In recognition of his courage the betel-traders made a grant, apparently for a *kal-nāḍu* (ll. 6-12). The stone was prepared by **Māchōja** of Indēśvaragēri (l. 12).

The **date** is given in l. 1 as Śaka 9[2]9, the cyclic year Plavaṁga being current. What is meant is evidently **A.D. 1007-8**, with which Plavaṁga coincided; the words *pravarttisuttum-ire*, "being current," refer to Plavaṁga, not to Śaka 929; for Plavaṁga corresponded to Śaka 929 *lapsed* and Śaka 930 *current*.

The **places** mentioned are **Donavura** (l. 2), the *ghaṭṭa* of **Tāvare**, or "the Lotus-Ghāṭ" (l. 6), the **Pānuṅgal** Five-hundred (ll. 7-8), **Poṭṭiyūr** (l. 9), and **Indēśvaragēri** (l. 12). Donavura must be Donūr, in the Bāgewāḍi *tāluka* of Bijāpūr District, in lat. 16° 44½′ and long. 76° 0¼′. It is not clear whether the *ghaṭṭa* of Tāvare means a mountain-range or pass, as Dr. Fleet holds (*Dyn. Kanar. Distr.*, p. 433), or a bank or quay. Pānuṅgal is of course the modern Hāngal, and Poṭṭiyūr is Hoṭṭūr. I cannot locate Indēśvaragēri; but there was a sanctuary of Indrēśvara at Baṅkāpūr.

TEXT.[2]

1 **Saka-varisha**[3] **9[2]9neya Plavaṁga-saṁvatsaraṁ** pravarttisuttum-ire **Rājar[ā*]ja Nitya-vinōda Rājēṁdra-vidyādha[ra]**

2 **Chōḻa-kuḷa-tiḷakaṁ Nūrmmaḍi-Chōḻaṁ** nava-lakhka(kkha)-balaṁ-berasu baṁdu **Donavuradoḷ=biṭṭ-iḻdu** dēsa(śa)v=ellavaṁ sūre-goṇḍu ·[s]trī-

3 vadhe bāḷa-vadhe brāhmaṇa-vadhegaḷaṁ geydu peṇḍiraṁ p[i]ḍidu jāti-nāsa(śa)ṁ-māḍi **Chōḻan=irppinaṁ** | Svasti śrī-rāja-

4 rā[ja] paramēsva(śva)ra parama-bhaṭṭārakan=**Akaḷa(ḷa)ṁkacharita[n-I]ṟiva-b[e]ḍaṁga Chāḷukya-kuḷa(ḷa)-tiḷa(ḷa)ka** Tiguḷa(ḷa)-māri śrī-

5 mat-**Satyāśraya-dēva[ṁ] Chōḻana[ṁ]** beṁ-koṇḍu vastu-vāhana-chayaṁgaḷa[ṁ] piḍidu teṁka-di-

[1] There seems to be likewise an inscription running down both sides of the stone. Very little of it is legible; but it apparently mentions Satyāśraya's *dig-vijaya* (cf. our inscription below, ll. 5-6), some of his titles, and the name (lost) and home (Mūlavaḷḷi) of the writer.

[2] From the ink-impression.

[3] Read *Śaka-varsha*.

6 g-vijayaṁ-geydu **Tāvareya** ghaṭṭadoḷ=iddu samudra-mudrita-dharā-chakramaṇ=ōka-

7 cha(chchha)[ttra-chchhāyeyoḷ ?] rājyaṁ-geyyutt-ire || Gaṁṇḍ * * * * * * * * * * * * mma **Pānuṁ-**

8 gall=[aynūṛa]ṛa nāḷ-gāvuṇḍu-geyye || * * * * * trapa * * * * * * * kke nalla

9 Manu-mārgg-ācharita Sōmēśvara-dāsi M * * yyaṁ[1] **Poṭṭiy**[ūra ?gāvuṇḍu-ge]yye | taḷaṛaṁ

10 **Gojjiga**[ṁ] ta[ṁ]buligar=eḷtaṁ kaḷḷar=kkoḷe **kādi** * * dēva-lōkakk=esedan | taṁbuliga-sāsi-

11 rvva[r*] neredu[2] eḷtige 1 vīsavaṁ eṁdiṁge koṭṭaru | idaṁ kādaṁg=asva(śva)-mēdhada phalaṁ aḷi-

12 daṁ paṁcha-mahā-pātaka || Besa-geydan=**Indēsva(śva)ragēriya Māchōja** |

TRANSLATION.

(Lines 1-3.) **The cyclic year Plavaṁga**, (*corresponding to*) **the 929th** (*year*) **of the Śaka era**, being current—when **Rājarāja Nitya-vinōda Rājēndra-vidyādhara**, ornament of the **Chōḷa** race, **Nūrmaḍi-Chōḷa**, came accompanied by a host of nine-hundred thousand (*men*), halted at **Donavura**, and was ravaging the whole country, perpetrating murders of women, children, and Brāhmaṇs, seizing women, and overthrowing the order of caste,—

(Lines 3-7.) Hail!—the auspicious king of kings, supreme Lord, supreme Master, **Akaḷaṅkacharita Irivabeḍaṅga**, ornament of the **Chāḷukya** race, slayer of Tamils, the auspicious king **Satyāśraya**, drove away the **Chōḷa**, captured his trains of baggage-waggons, and made a triumphal progress through the South;

(Lines 7-11.) And while (*in the course thereof*), being at the *ghaṭṭa*[3] of **Tāvare**, he was reigning over the circle of the ocean-sealed earth under the shadow of his single parasol, at what time . . . was exercising the office of county-*gāvuṇḍa* over the **Pānuṅgal Five-hundred**, (*and*) . . . follower of the courses of Manu, servant of Sōmēśvara, was exercising the office of *gāvuṇḍa* over **Poṭṭiyūr**, the beadle **Gojjiga** defended the kine of the betel-sellers when robbers were carrying them off . . . and rose to honour in paradise. The Thousand of the betel-sellers in assembly granted 1 *vīsa* for each ox in perpetuity.

(Lines 11-12.) To him who preserves this there shall be the same reward as for an *aśvamēdha* sacrifice; he who violates it incurs the guilt of the five deadly sins. **Māchōja** of **Indēśvaragēri** executed the order.

B.—OF THE REIGN OF JAYASIMHA II: SAKA 959.

This record is cut upon a stone which was found somewhere in Survey No. 91; the exact site I do not know. The slab has a rounded top, with sculptures: in the centre a *liṅga* on a stand; on the proper right a cow (?); above it, the sun (to right) and moon (to left). The inscribed area below this is about 6 ft. 1½ in. high and 2 ft. 11½ in. wide.—The character is Kanarese, of a rather irregular hand of the period. The letters vary in height from about 1 in. to ⅛ in.; they are largest at the beginning. The inscription is rather worn, and it is often quite uncertain whether the *sonne* is written. In the first half of the record the cursive *y* (above, Vol. XII p. 335) is more usual than the tripartite form; the cursive *m* appears thrice, the cursive *v* thrice.—The language, except for the standing formulæ of verses 3 and 4, is Old Kanarese. The *ḷ* is

[1] Possibly *Mārayyaṁ*.

[2] Or *neradu*: the letter is not clear.

[3] Either "mountain-range," or "quay."

preserved in *iḷḍa*[*ṁ*], l. 2, *iḷḍu*, l. 41, *negaḷḍ=*, l. 19, and irregularly in *paḷam*, l. 42; it is replaced by *ḷ* in *peḷavara*, l. 16, *aḷid=*, l. 43, *aḷida*, l. 44, and perhaps *baḷiy=*, l. 37. Initial *p* is kept throughout. Of some lexical interest are: *vaḍḍa-lāguḷa*, l. 32, and *vaḍḍa-lāvuḷa*, l. 37 (for the more usual form *vaḍḍa-rāvuḷa*), *pannakēṇi*, l. 32, and *chaṭṭa*, l. 24.

The record opens with a short statement of a grant made by the three controllers of taxes of the county (ll. 1-3). It then refers itself to the reign of **Jayasiṁha (II) Jagadēkamalla** (ll. 4-6), and states that at the time of the endowment to be chronicled **Akkā-dēvi**[1] (the sister of Vikramāditya V, on whom see *Dyn. Kanar. Distr.*, pp. 435, 437, 439 f.) was ruling the **Banavāsi Twelve-thousand** (ll. 6-7); the *mahā-maṇḍalēśvara* **Mayūravarma-dēva**, "**lord of Banavāsi best of cities**" and "a lion for **Harikānta**," was administering the same province and the **Pānuṅgal Five-hundred** (ll. 8-12); **Māra Gāvuṇḍa** of Poṭṭiyūr, who is described as "a brother-in-law to the lame" (cf. inscription C. below, ll. 16-17) and hence by reason of this service to the physically afflicted as "a *tīrttha* (holy place, where the sick and crippled resort for divine help) in the midst of the county, a Sōmanātha (Sōmnāth) of the south," was serving as *prabhu* or sheriff of the **Pānuṅgal Five-hundred** (ll. 13-22); the *Kannaḍa-sandhivigrahi* (minister for affairs of peace and war in the Kannaḍa country) and general **Chāvaṇarasa**, who is described among other epithets as a *chaṭṭa* to **Siṅga** (possibly Jayasiṁha II), a comet (or fire) to the **Konkaṇ**, an uprooter of **Pannāḷa**, a grindstone to **Baḷeyavaṭṭaṇa**, a shatterer of the pride of the fortress of **Bijavādi**, and a *diśā-paṭṭa* to **Dōra**, was ruling the **Beḷvala Three-hundred** and the **Purigere Three-hundred** (ll. 23-29); and the *pergaḍe* **Akalimayya** was controlling the taxation of **Belvaḷa** and **Purigere** (ll. 29-32). Then follows the specification of the endowment (ll. 32-42), by which certain high revenue officials arranged for the division of the tolls on betel-leaves between the various taxation-departments and assigned a proportion for the upkeep of the **Keṁgere**, or "Red Tank," presumably in or near Poṭṭiyūr. The record ends with a moral verse written by the town-clerk **Dāsimayya** or **Dāsiga**.

It is worthy of note that the **Banavāsi** province was at this time under the rule of both **Akkā-dēvi** and **Mayūravarman**. The fact suggests that there was some close connection between the two, such as that of husband and wife; and this inference is supported by the inscription C. below, which shews that Akkā-dēvi's son, the Kādamba *mahā-maṇḍalēśvara* **Tōyima-dēva**, possessed titles very similar to those borne in the present record by Mayūravarman. Both were "lords of Banavāsi best of cities"; Mayūravarman is *Harik*[*ā**]*ntana siṁga* (B., l. 10), Tōyima-dēva is *Harigana siṁga* (C., l. 13). It seems therefore reasonable to infer that Mayūravarman was married to Akkā-dēvi, and that Tōyima-dēva was their son. Mayūravarman's title *Harikāntana siṁga*, "lion of Harikānta," seems to point to some services rendered to a king of that name, who may have been a predecessor (perhaps the grandfather) of the Kādamba Harikēsarin or Hariga of Baṅkāpūr; see above, Vol. XIII, p. 168 ff., and below, inscr. C.

The date[2] is specified on l. 34 as: Śaka 959, Īśvara; Mārgaśira śuddha 11; a Monday. This is regular: the given *tithi* corresponded to **Monday, 21 November, A.D. 1037**, on which day it ended at 11 h. 50 m. after mean sunrise (for Ujjain).

The places mentioned are **Poṭṭiyūr**, *i.e.* Hoṭṭūr (ll. 19, 34); the **Banavāsi Twelve-thousand** (ll. 7, 12, 32; spelt *Vanavāse* on l. 7); the town of **Banavāsi** (l. 8); **Sōmanātha** (l. 17); the **Pānuṅgal Five-hundred** (ll. 12, 22, 32, 38); the **Koṅkan** (l. 26); **Pannāḷa** (l. 26); **Baḷeyavaṭṭana** (l. 26); **Bijavāḍi** (l. 27), **Dōra** (l. 27); the **Beḷvala Three-hundred** (l. 28); the

[1] I think there can be no reasonable doubt that this name must be restored on l. 7, although the letters *kkā* have to be supplied by conjecture to fill the gap caused by the breaking of the stone on the proper right side.

[2] I have to thank Mr. R. Sewell for his kindness in verifying my calculations in this and the next inscription.

Purigere or Puligere Three-hundred (ll. 28, 39); the **Six-hundred** composed of **Belvala and Puligere** (ll. 31, 39); **Mūlavaḷḷi** (l. 36); **Kallavana** (l. 36); the **Ninety-six** (l. 40); the **Kem-gere** or "Red Tank" (ll. 41, 42); and **Bāṇarāsi**, *i.e.* Benares (l. 43). Sōmanātha is of course the famous sanctuary of Sōmnāth in Junāgarh State; and Pānuṅgal is now Hāngal. Pannāla, elsewhere termed also Pannāḷeya-kōṭe, Pannāḷe-durga, Praṇālaka-durga, and Padmanāla-durga, is now Panhālā, about 12 miles NW. of Kōlhapūr (see *Dyn. Kanar. Distr.*, p. 546). Baleya-vaṭṭaṇa is mentioned again in *Ep. Carn.*, Vol. II (*Inscr. of Śravaṇa Belgoḷa*), No. 56 (cf. ibid., introd., p. 41, and *Dyn. Kanar. Distr.*, p. 496). I venture to identify it with the modern Baḷia-paṭṭam (more correctly written Vaḷapaṭṭanam), lying in lat. 11° 55′ and long. 75° 22′ in the Chirakkal *tāluka* of Malabar District, a few miles NW. of Cannanore. Baliapaṭṭam was a place of considerable importance in early times; it is the *Balaipatna* (wrongly written in some editions as *Baltipatna*) of Ptolemy's Geography, VII. i. § 6, and apparently the *Palaipatma* of the Periplus (cf. McCrindle, *Ancient India as described by Ptolemy*, p. 45, and id., *Commerce and Navigation of the Erythrean Sea*, pp. 127, 129; Lassen, *Alterthumer*, III, pp. 181, 183); and there is much likelihood in Kern's view that Ptolemy's *Balaipatna* is the Baladēvapaṭṭaṇa mentioned in Varāha-mihira's *Bṛihat-saṁhitā*, xiv. 16. Bijavāḍi is uncertain: it may conceivably be the modern village of Bijwāḍgi near Hungund. Dōra, if it is a geographical name, may possibly be the same as Dōrasamudra. On Belvala see above, Vol. XIII, p. 40; on Puligere or Purigere, ib., Vol. XIII, pp. 179, 188. Mūlavalli is possibly Munawaḷḷi, a village about 4½ miles SSE. from Shiggaon, 1½ miles SE. from Hoṭṭūr, and ¾ mile NW. from Baṅkāpūr.

TEXT.[1]

[Metres: v. 1, *Kanda*; vv. 2 and 5, *Champakamālā*; v. 3, *Anushṭubh*; v. 4, *Śālinī*.]

1 Śrīmatu mūru nāḍa suṁkigaruv=iḷdu munne naḍev=āṟu pōrina mēle ||

2 . . . [kā]ruṇyadiṁ dharmma-chittaṁ puṭṭi mattaṁ biṭṭa pēru 1 antu 7 pēṟ[u]m [[*]] biḍad=iḷda[ṁ] kavilè brāhma-

3 [naruman=a]ḷi[da] paṁcha-mahā-pātakan=akku

4 [Svasti samasta-bh]uvaṇ-āśraya Śrī-Pṛi(pṛi)thvī-vallabha mahārājādhirāja paraṁè-śvara paramabhaṭṭārakaṁ **Satyāśraya**-kuḷa-ti-

5 [ḷakaṁ **Chā**]ḷuky-ābharaṇaṁ śrīma[j*]-**Jagaḍēkamalla-Jayasiṁga**-dēvara rājyam=uttar-ōttar-ā-

6 [bhivṛiddhi]-pravarddhamānam=ā-chandr-[ā*]rkka-tāraṁ baraṁ saluttam-ire | tat-pāḍa-padm-ōpajīvi śrīmad-**A**-

7 [**kkā**]-dēviyar=**V**vanavāse-**pannirchhāsiramuvaṁ** śu(su)kha-śa(sa)ṁkathā-vinōdadin=āluttam-ire ||

8 [Sva]sti samadhigata-paṁcha-mahā-śabda-mahāmaṇḍaḷēsva(śva)raṁ **Banavāsi-puravar-ēsva(śva)raṁn=ahi-**

9 [ta-ba]ḷa-jala-vimathana-janita-vīra-lakshmī-virājita-prachaṇḍa-dōr-ddaṇḍa birudara gaṇḍan=adaṭa-

10 [ra ṭaḷa]-prahāri subhaṭa-Murāri sāhas-ōttuṁga **Harik[ā*]ntana siṁga** vīra-śrī-pavitra śu-

11 [bhaṭa-Tr]iṇētra Rudr-āvatāra nām-ādi-samasta-prasa(śa)sti-sahita śrīman-**Mayūra-varmma-dēvar Ba-**

12 [navā]si-**pannirchhchhāsiramumaṁ Pānuṁgall=aynūṟuman=ēkāyatpadiṁ**[2]**-**āḷdu sukha-saṁkathā-vinōdadoḷ=ire

[1] From the ink-impression.

[2] Read *=ēka-chchhattradin=* [or *=ēk-ātapatradin=*,—Ed.].

13 [ta]t-pāda-padm-ōpajīvi S[v*]asty=anēka-guṇa-gaṇ-āḷaṁkāra para-nārī-dūra gōtra-pavitra budha-jana-mitra

14 [ś]auch-Āṁjanēya satya-Rādhēya Sūryyaṁge bhakta durjjana-virakta keḷe-geyde (yye?) ku(kū)rppa[ṁ] kūrtt=īyal=ārppa[ṁ]

15 [b]udha-jan-ādhāra vine(na)y-āvatāra si(śi)shṭa-prasaṁga nuta-dhairyy-ōttuṁga āśrita-janа-kalpa-

16 vri(vṛi)kṣha bandhu-jana-chintāmaṇi dāna-chūḍāmaṇi Kali-yuga-Mahēsva(śva)ra peḷavara bhāva Sō-

17 [mē]sva(śva)ra-dāsi vine(na)ya-viḷāsi naḍu-nāḍa tīrttha teṁkaṇa Sōmanādha(tha) nām-ādi-samasta-prasa(śa)sti-

18 sahita śrīmatu || Dānaṁ par-ōpakāra[ṁ*] j̃ñāna[ṁ*] Si(Śi)va-bhakti satyam=eṁb=oḷ-guṇadoḷu

19 tān=adhikan=enisi negaḷd=abhimāna-dhana[ṁ*] **Poṭṭiyūra Māran=udāra** || [1*] Vidita-yasō(śō)-rtthan=eṁbudu | budha-

20 stutan=eṁbudu | satyavantan=eṁbudu | naya-sā(śā)ḷiy=eṁbudu | dayā-paran=eṁbudu | sundar-āṁgan=eṁbu-

21 du [|*] Manu-mārggiy=eṁbudu | guṇ-āgraṇiy=eṁbudu | gōtra-ratnan=eṁbudu | sakha(ka)ḷ-āvanī-ta[la]-

22 d[o*]ḷ=ēm peṛat=eṁbude **Māra-Gāvuṇḍana** || [2*] Antu **Pānuṁgall=aynūṛakkaṁ** prabhutanaṁ-geyvuttam-ire |

23 Svasti[1] samadhigata-paṁcha-mahā-sa(śa)bda-mahā-śa(sa)ndhi-vigrah-ādhipati mahā-prachaṁṇḍa-daṇḍanāyakaṁ

24 ari-ghaṭ[ā*]-maḷḷaṁ **Siṁgaṇa chaṭṭan=āśrita-jana-kaḷpa-vṛiksha[ṁ*]** bhri(bhṛi)tya-chiṁntāmaṇi satya-Kānina[ṁ*] samara-du(dhu)-

25 raṁdhara[ṁ*] pratipaksha-rākshasaṁ ripu-kuraṁga-paṁchānana[ṁ*] pirid=ittu maṛeva[ṁ] chalamaṁ meṛevaṁ pi-

26 suṇa-taḷa-prahāri giri-durgga-malla[ṁ*] **Koṁkaṇa-dhūma-kētu Pannāḷ-ōnmūḷanaṁ Baḷeyavaṭṭaṇa-gharaṭṭaṁ**

27 **Bijavāḍi-kōṭe-darppa-daḷanaṁ Dōra-diśā-paṭṭa**[ṁ*] śrīma[j*]**-Jagadēkamalla-dēva-**pāda-paṁkaja-bhramaraṁ śrīmat-Ka-

28 **ṇaḍa-santhi(ndhi)vigrahi daṇḍanāyakaṁ Chāvaṇarasar Beḷvala-mūnūṛuva**[ṁ] **Purigere-mūnūṛuvaṁ** sukha-saṁkha(ka)-

29 thā-vinō[da*]din=āḷuttam-ire || Tatu-pāda-padm-ōpajīvi Svasti samasta-rājya-bhara-nirūpita-mahāmātya-padavī-virā-

30 jamāna mān-ōnnata prabhu-ma[ṁ]tr-ā(ō)tsāha-śakti-traya-saṁpanna pati-hit-āchāryyan=achaḷita-dhau(dhai)ryya nuḍi-

31 d=ante gaṇḍa nām-ādi-samasta-prasa(śa)sti-sahitaṁ śrīmatu perggaḍe **Akalimayyaṁ**gaḷ=eraḍ=aṛunūṛaṛa suṁka-

32 man=āḷutt-ire | pannakēṇi vaḍḍa-lāguḷada suṁka-verggaḍe **Saṁgavayyanuṁ Banavāsi-pannirchchhāsirada** suṁ-

33 ka-verggaḍhe(ḍe) **Chāvuṇḍamayyanuṁ Pānuṁgall=aynūṛaṛa** manneya suṁka-verggaḍe **Dūḍiyammanu**[ṁ] ant=anibaruv=i-

34 ḷdu ☙ **Saka-varisha[2] 959neya Isvara[3]-saṁvatsarada Mārggasi(śi)ra-su(śu)ddha ēkādaśi(śi) Sōmavāradandu Poṭṭiyūra Mā-**

---

[1] This word is preceded on the stone by a *śaṁkha*-symbol made up of small circles.

[2] Read *Śaka-varēṣa*.

[3] Read *Īśvara*-.

35 ra-Gāvuṇḍuṁ[1] Gakaṟuva Surimayya Poleyamma |Gētimayya perggaḍe
- Būhimayya sēnabōva Dāsimayya

36 int=ivar=mmodal=āgi mūvadiṁbarggaṁ Mūlavaḷḷi bāḍa Kallavaṇaṁ[2] antu nālku
bāḍak[kaṁ* ?] koṭṭa sā(śā)sana-maryyā-

37 de eṁnt=endaḍe eleya pēṟimge patteṁṭ[u*] biṭṭu baḷiy=eleya pēraṁ kaḷedu
vaḍḍa-lāvuḷada suṁkadavaru pēṟiṁge ko-

38 ḷva vīsavaṁ pattu | Pānuṁgall=aynūṟaṟa perjjuṁkaṁṭuṁ manneya suṁkamuṁ
kūḍi pēriṁge koḷva vīsavaṁ panneṟaḍu vare |

39 eraḍ-aṟunūraṟa perjjuṁkadavaru pēṟiṁge koḷva vīsavaṁ padinaydu Puligere-
nāḍa manneya suṁkadavaru pēṟiṁge ko-

40 ḷva vīsav=aydu | toṁbhatt-āraṟa maṁnneya suṁkadavaru pēṟiṁge koḷva
vīsavav=ondu vare | ant=anibaru suṁki-

41 garuv=iḷḍu ı(ī) Keṁger[e*]ge barisavaḷa āṟu pēṟa suṁkamaṁ biḍuvaru |
taṁbuliga-sāsirvvaru |[3] i(ī)

42 Keṁgerege pēṟinalu koṭṭa vīsavan=ondu | Ant=ī dharmmama[ṁ*] kiḍal=ıyade
kād-ātaṁge asva(śva)mēdhaṁ geyda palam[4]=a-

43 kku Alid-ātaṁge Bāṇarāsiyoḷu sāï(yi)ra kavileyuma[ṁ] sāsi[rvva]ru chatur-vvēda-
pāragar=appa br[ā*]-

44 hmaṇaran=aḷida paṁcha-mahā-pātakan=akku | Sva-dattāṁ para-dattāṁ v[ā] yō
harētu(ta) vasuṁdharāṁ [|*] shashṭir=vvarshsha-sa-

45 hasrāṇi |[5] vishṭhāyāṁ jāyatē krimi[6] || [3*] Sāmāṇyō=yaṁ dharmma-sētu[r*]
nri(ṇṟi)pāṇāṁ kāḷē kāḷē pāḷanīyō bhavadbhi[ḥ*] | sarvvān=ē-

46 tān=bhāgina[ḥ*] prātivēṁdra[7] | bhūyō bhūyō yāchatē Rāmabhadra[ḥ] || [4*]
[⌣ ⌣ ⌣ ⌣ — ⌣ — ⌣ ⌣ ⌣] sōlad-ir=āhava-raṁga-bhūmiyō-

47 ḷu kusiyad-ir=ittudaṁ magulc koḷḷad-ir[— ⌣ ⌣ — ⌣ — ⌣ — | ⌣
⌣ ⌣ ⌣ — ⌣ — ⌣ ⌣ ⌣ —]ṭṭad-ir=ōykane laṁchav=indu koṇḍ=esa-

48 gad-ir=ēḷuvēḷe narakaṁ narargg(rg)=endapan=alte Dāsiga | (||) [5*]- Antu
Manu-mārggi . . . tanime . . . . . , sēnabōva Dāsimayya[m*] barada[m]

TRANSLATION.

(Lines 1-3.) . . . The three controllers of taxes of the county in assembly, inspired by piety, graciously assigned in addition to the six loads previously in usage (*for the income of the sanctuary*) 1 load more, altogether 7 loads. He who fails to make the grant shall incur the guilt of the five deadly sins, as though he destroyed cows and Brāhmaṇs.

(Lines 4-6.) When the reign of—hail!—the asylum of the whole world, favourite of Fortune and Earth, great Emperor, supreme Lord, supreme Master, ornament of Satyāśraya's race, embellishment of the Chāḷukyas, king Jagadēkamalla-Jayasiṁga, was advancing in a course of successively increasing prosperity, (*to endure*) as long as moon, sun, and stars :—

(Lines 6-7.) While she who finds sustenance at his lotus-feet, Akkā-dēvi, was ruling the Vanavāse Twelve-thousand with enjoyment of pleasant conversations :—

(Lines 8-12.) While—hail!—the Mahā-Maṇḍalēśvara who has obtained the five great musical sounds, lord of Banavāsi best of towns, who bears all titles such as "he whose

[1] An error for *Gāvuṇḍanuṁ* or *Gāvuṇḍaṁ* ?
[2] Apparently some names have been omitted.
[3] This *daṇḍa* is superfluous.
[4] Read *phaḷaṁ*.
[5] This *daṇḍa* is superfluous.
[6] Read *kṛimiḥ*.
[7] Read *pārthivēṁdrān*, and delete the *daṇḍa*.

terrible rod-like arm is adorned by warriors' Fortune engendered from churning the waters of hostile hosts,[1] hero of title-bearers, buffeter of the bold, a Murāri to brave soldiers, exalted in enterprise, a lion to **Harikānta**, pure with warriors' Fortune, a Triṇētra [Śiva] of brave soldiers, an embodiment of Rudra," king **Mayūravarman**, ruling the **Banavāsi Twelve-thousand** and the **Pānuṅgal Five-hundred** under his single parasol, was in the enjoyment of pleasant conversations :—

(Lines 13-18.) While one who finds sustenance at his lotus-feet, the bearer of all titles such as—hail !—" adorned by a series of many virtues, remote from others' wives, purifying his *gōtra*, friend to sages, an Āñjanēya [Hanumān] in purity, a Rādhēya [Karṇa] in truthfulness, votary of the Sun, ill-disposed to the evil, delighting in making friendship, strong in glad giving, foundation of sages, embodiment of culture, associating with the refined, exalted in renowned firmness of character, tree of desire to dependents, wishing-gem to kinsfolk, crest-jewel of bounty, a Mahēśvara of the Kali Age, a brother-in-law to the lame, servant of Sōmēśvara [Śiva], brilliant in culture, a site of salvation in the centre of the county, a southern Sōmanātha," the fortunate—

(Verse 1.) **Māra of Poṭṭiyūr**, illustrious for his pre-eminence in the goodly qualities of bounty, philanthropy, knowledge, devotion to Śiva, (*and*) truthfulness, is rich in esteem, noble :—

(Verse 2.) Of **Māra Gāvuṇḍa** it may be said that he knows the meaning of fame, that he is praised by sages, truthful, politic, gracious, comely of person, observant of the courses of Manu, eminent in virtue, a gem of his *gōtra*, (*than who*) what higher thing is there on the whole earth ?—

(Line 22.) Was thus holding the shrievalty over the **Pānuṅgal Five-hundred** :—

(Lines 23-29.) While—hail !—the High Commander for affairs of peace and war, who has obtained the five great musical sounds, the great august general, wrestler with hosts of foes, *chaṭṭa* for **Siṅga**, tree of desire for dependents, wishing-gem for servants, a Kānīna [Karṇa] in truthfulness, leader in battle, demon to adversaries, lion to the deer his enemies, giving abundantly and forgetting it, displaying enterprise, buffeter of the malignant, wrestler with mountain fastnesses, a comet[2] to the Koṅkaṇ, an uprooter of **Pannāḷa**, a grindstone to **Baḷeyavaṭṭaṇa**, a shatterer of the pride of the fortress of **Bijavāḍi**, a scatterer[3] of **Dōra**, a bee to the lotus-feet of king **Jagadēkamalla**, minister for affairs of peace and war in the Kannaḍa (*country*), the General **Chāvaṇarasa**, was ruling the **Beḷvala Three-hundred** and the **Purigeṛe Three-hundred** with enjoyment of pleasant conversations :—

(Lines 29-32.) While one who finds sustenance at his lotus-feet,—hail !—he who possesses all titles such as " illustrious in the office of high minister appointed for the administration of the whole kingdom, exalted in dignity, having the three powers of lordship, counsel, and enterprise, teacher of weal for his master, immovable in firmness, a man of valour in accordance with the name," the superintendent **Akalimayya**, was administering the taxation of the two (*provinces of Beḷvala and Puligeṛe forming*) a **Six-hundred**,[4]—

(Lines 32-34.) **Saṅgavayya**, controller of the taxes of the *pannakēṇi vaḍḍa-lāguḷa*,[5] and **Chāvuṇḍamayya**, controller of the taxes of the **Banavāsi Twelve-thousand**, and **Dūḍiyamma**,

[1] This epithet is meant to suggest a reminiscence of the legend of Lakshmī's birth from the churning of the Milk-Ocean.

[2] Or, fire.

[3] Kittel's Dictionary explains *diśā-paṭa* as "causing (his enemies) to be scattered in all directions."

[4] See Dr. Fleet's note on the Soraṭūr inscription, above, Vol. XIII, p. 178.

[5] *Paṇṇakēṇi* seems to be connected with *kēṇi* (*krēṇi*), "traffic, trade"; the first half may perhaps be connected with *paṇṇ-āya*. The forms °*lāguḷa* (l. 32) and °*lāvuḷa* (l. 37), beside the more usual °*rāvuḷa*, shew the history of the word, which seems to be connected with *lāvaṇa*, *lāvaṇi*, and the Marāṭhī *lāgaṇeṁ* (see Kittel, s.v.); hence *lāguḷa* (or *lāguṇa* ?) would be the oldest form, *lāvuḷa* next in order of time, and *rāvuḷa* the last. Cf. the word *ekka-lāvaṇa* in the inscriptions of Iṭṭagi and Sūḍi (above, Vol. XIII, p. 46, Vol. XVI, p. 86 and note).

controller of the taxes of the seigniories of the **Pānuṅgal Five-hundred**, being together in assembly,—

(Lines 34-42.) On **Monday, the eleventh day of the bright fortnight of Mārgaśira** in the cyclic year **Īśvara, the 959th** (*year*) **of the Śaka era**, gave to the Thirty, headed by **Māra Gāvuṇḍa of Poṭṭiyūr, Gakaruva Surimayya, Poleyamma Gētimayya,** the superintendent **Būhimayya,** and the town-clerk **Dāsimayya,** and to the four towns, namely the towns of **Mūlavaḷḷi** and **Kallavaṇa**, an edictal regulation of the following tenour: granting on each load of betel-leaf eighteen (*leaves*), and excepting the loads of *baḷi*-betel,[1] the controllers of the taxes of the *vaḍḍa-lāvuḷa* shall draw ten *vīsa* on each load; the main-tax of the **Pānuṅgal Five-hundred** and the seigniorial tax thereof jointly shall draw twelve *vīsa* on each load regularly; the controllers of the main-tax of the two (*provinces of Beḷvala and Puligere forming*) a Six-hundred shall draw fifteen *vīsa* on each load; the controllers of taxes of the seigniories in the **Puligere** county shall draw five *vīsa* on each load; the controllers of taxes of the seigniories of the Ninety-six shall draw one *vīsa* on each load regularly. The above tax-officers in assembly shall assign to this **Keṁgeṛe** the tax of six loads as annual income. The Thousand of betel-traders granted to this **Keṁgeṛe** one *vīsa* on each load.

(Lines 42-44.) So to him who guards this pious foundation, not suffering it to be injured, there shall be the same fruit as if he performed a horse-sacrifice; to him who violates it there shall be the guilt of the five deadly sins, as though he destroyed at Benares a thousand kine and a thousand Brāhmaṇs versed in the Four Vēdas.

(Verses 3-4: two common Sanskrit verse-formulæ.)

(Verse 5.) . . . . . be not défeated, on the stage of battle bend not, take not back what has been given . . . . . duly, take now no bribe. There is a sevenfold[2] hell for men. Thus verily saith Dāsiga.

(Line 48.) So the follower in the courses of Manu . . . . . the town-clerk **Dāsimayya** has written.

C.—OF THE REIGN OF SOMESVARA I: SAKA 988.

This is upon a slab found by the *hoṇḍa* or tank in the village. The stone has a rounded top divided vertically into three compartments containing **sculptures**: in the central one is a *liṅga* on a stand; in that on the proper right is a seated votary facing full front, with the sun and moon above; in that on the left, a cow and sucking calf. The inscribed area below this is 3 ft. 10½ in. high and 3 ft. 6 in. wide.—The **characters** are good Kanarese of the period, but considerably worn, so that it is often difficult to arrive at certainty in the reading of details such as the *sonne*. The letters are from ½ in. to ¾ in. high. The cursive *y* (above, Vol. XII, p. 335) is used in *Poṭṭiyūr*= (l. 5).—The **language** is Old Kanarese, except for the formal Sanskrit verses on ll. 40-42. The *ḷ* appears in *irḷda*, for *iḷda* or *irda* (l. 15), *negaḷdan* (l. 18), *nāḷ*° (l. 22), *iḷdu* (ll. 22, 32); it is changed to *ḷ* in *Chōḷa* (l. 4), *peḷavaṁge* (l. 17), *aḷid-* (l. 39), and to *r* in *bērkurē* (l. 17). Initial *p* is preserved, except in the name *Haṇḍiyūr* (l. 6). The *upadhmānīya* is found in the Sanskrit *bhāginaḥ=p*° (l. 41). Words of lexical interest are: *kuttuṁbitti* (l. 6), *garuḷi* (l. 12: Kittel has *garuḍi*), *baṁgāṛa* (l. 13: apparently to be distinguished from *baṁgāra*), *baruhi* (l. 23: for Sanskrit *barhi*), *sote* (l. 32: possibly connected with Sanskrit *sudhā*), *pòge-voge* (l. 34), *pada-bara* (l. 35), *boja*ṁ*ga* (l. 37), *ugura* (l. 37). On the nominatively used genitive *Kēsi Gāvuṇḍana* in l. 32 see *J. R. A. S.*, 1918, p. 105.

The **record** first refers itself in ll. 1-3 to the reign of **Traiḷōkyamalla-Āhavamalla (Sōmēśvara I)**, and then mentions one of his feudatories, the Mahā-Maṇḍalēśvara **Jēmarasa**, as

[1] I do not know whether *baḷi* here means a special kind of betel, or signifies "gift."

[2] This is also the Jain number. Manu speaks of 21.

ruling over **Poṭṭiyūr, Elavaṭṭi, Niṭṭasiṅgi, Haṇḍiyūr,** and many other towns and *kuttumbitti* as an *aṇugu-jīvita* or "love-fief" (ll. 3-6). Jōmarasa among other titles is described as "a submarine fire to the ocean of the **Chōḷa's** hosts" (see *Dyn. Kanar. Distr.*, p. 436) and as "a flame of doom to **Bhōja,**" namely the **Paramāra Bhōja of Mālwā** (*ibid.*). The record then introduces Jōmarasa's son, the Mahāsāmanta **Jōyiyarasa,** as governing Poṭṭiyūr as a *kumāra-vṛitti* or "prince's fief" (ll. 6-8), and then gives at great length the titles and dignities of the **Kādamba** Mahā-Maṇḍalēśvara **Tōyima-dēva, "lord of Banāvasi** best of towns," **"warrior for Mēruga," "lion of Hariga,"** etc., who at this time was administering the **Banavāsi Twelve-thousand** and the **Pānuṅgal Five-hundred** (ll. 8-14). Of this Tōyima-dēva we have already spoken (see above, inscr. B., and *Dyn. Kan. Distr.*, pp. 435, 564). His title "lion of Hariga" seems to indicate services rendered to his kinsman the **Kādamba Hariga** or **Harikēsarin of Baṅkāpūr,** whose record of Śaka 977 has been published by me above, Vol. XIII, p. 168 ff.

Our inscription now introduces **Gōḍuvara Māra Gāvuṇḍa** of Poṭṭiyūr (ll. 15-18). Māra's acquaintance we have already made in inscription B.; we here learn the reason for the title "brother-in-law to the lame," which is given to him there (l. 16); for here we are told that to many footless men who came to seek his favour he gave feet. What precisely is meant by this is not clear. It may be that Māra furnished them with wooden legs; it may be that he supplied them with medical treatment (or perhaps even faith-healing).[1] Be this as it may, he gained a great reputation, and was called **"a southern Sōmanātha"** (as in inscr. B.). We next learn that his son **Chāḷukya-Gaṅga-Vermāḍi Kēśava (Kēsirāja or Kēsi) Gāvuṇḍa** was at the time serving as Gāvuṇḍa of Poṭṭiyūr (ll. 18-22). Kēsi obtained from the **Kādamba** king **Hariga (Harikēsarin of Baṅkāpūr,** to whom we have referred in the last paragraph) all the emblems of royalty (ll. 23-24), and received similar honours from king **Chāḷukya-Gaṅga-Vermāḍi (Vikramāditya VI:** cf. the Baṅkāpūr inscription, l. 10, above, Vol. XIII, p. 170), who, regarding him as a son, gave him his own name (ll. 24-26). Besides making various bountiful gifts to men of eminence (ll. 27-28), Kēsi constructed a temple of Śiva with the title of Kēśavēśvara (ll. 28-30). For this temple an endowment was granted by **Jōyiyarasa, Tōyima-dēva,** and **Mailala-dēvi** (ll. 30-35). Who this Mailala-dēvi was does not appear; possibly she was **Tōyima-dēva's** wife. As a supplement to this endowment, Tōyima-dēva's mother **Akkā-dēvi** (on whom see above, inscr. B.) assigned to the monastery the fee due to her on the occasion of "laving the feet," formally transferring it to the nun **Gaṅgikabbe** (ll. 35-37). It is interesting to find a woman holding such a representative position in a community of Śaiva ascetics. Finally we learn that the inscription was composed by the poet **Rājavallabha,** and was corrected and amplified by **Chandra Bhaṭṭa** (see *J.R.A.S.*, 1920, p. 377 n.) and **Baḷabhadra-dēva;** the mason was **Dāsōja** (ll. 43-44).

The **date** is specified on ll. 30-31 as: Śaka 988, the cyclic year Parābhava; the full-moon of Paushya; Sunday; the *nakshatra* Hastā; the *uttarāyaṇa-saṁkrānti*; a *vyatīpāta*. This is grievously incorrect, if we reckon according to the Southern cycle. The full-moon of Paushya in the given year accordingly fell on **Wednesday, 3 January, A.D. 1067,** on which day the full-moon *tithi* ended 11 h. 16 m. after mean sunrise. This *tithi* corresponded to the *nakshatra* Pushyā, not Hastā; and the *uttarāyaṇa-saṁkrānti* occurred on Sunday, 24 December, A.D. 1066, when the *nakshatra* was Pūrva-Phalgunī. On the other hand, if we calculate by the Northern cycle, the *tithi* would correspond to **Sunday, 26 December, A.D. 1064,** on which day it ended about 12 h. 24 m. after mean sunrise; but the *uttarāyaṇa-saṁkrānti* of that year took place 21 h. 53 m. after mean sunrise on Thursday, 23 December, and the *nakshatra* at mean sunrise on the

[1] Several cases of faith-healing for lameness are recorded in the inscriptions of Epidauros: see Collitz and Bechtel, *Sammlung d. griech. Dialekt-Inschriften*, III. iii., Nos. 3339, 3340.

full-moon day of Paushya was Punarvasu. Calculation by mean longitudes and motions will not remove these discrepancies; for it gives as *tithi* and week-day the same date (Sunday, 26 December, A.D. 1064), with Friday, 24 December, for the *uttarāyaṇa-saṁkrānti*, and Punarvasu as *nakshatra*.

The places mentioned are: **Poṭṭiyūr** (ll. 5, 8, 15, 22, 30, 32 f.), **Elavaṭṭi** (l. 6), **Niṭṭasiṅgi** (l. 6), **Haṇḍiyūr** (l. 6), the **Male** or Highlands (l. 11), **Banavāsi** (l. 11), the **Banavāsi Twelve-thousand** (l. 14), the **Pāṇuṅgal Five-hundred** (l. 14), and **Kōvageṛe** (l. 33 f.). Elavaṭṭi is the village called Yelawati in the Bombay Postal Directory and Yalvatti in the Bombay Survey; it lies in Hāngal *tālūka*, in lat. 14° 51¾′ and long. 75° 10½′. Niṭṭasiṅgi is now Niḍsiṅgi (Nidsangi in the Bombay Survey), in the same *tāluka*, in lat. 14° 52′ and long. 75° 10¼′. Haṇḍiyūr I cannot locate, unless (which I doubt) it is to be identified with "Handihál" of the Survey, a village 4½ miles nearly west of Hāngal town, in lat. 14° 45¼′ and long. 75° 5½′.

TEXT.[1]

[Metres: vv. 1, 3, 4, 6, *Kanda*; vv. 2, 7, 8, 9, *Mattēbhavikrīḍita*; v. 5, *Mahāsragdharā*; v. 10, *Śālinī*; vv. 11, 12, *Anushṭubh*; v. 13, *Champakamālā*.]

1 o ○ o Svasti samasta-bhuvan-āśraya Śrī-Pri(pṛi)thvī-vallabha mahārāj-ādhirāja paramēsva(śva)ra parama-bhaṭṭārakaṁ **Satyāśraya**-kuḷa-tiḷakaṁ **Chāḷu-**

2 **ky**-ābharaṇam śrīma[t*]-**Traiḷōkyamalla-Āhavamalla-dēvara** vije(ja)ya-rājyam=uttar-ōttar-ābhivri(vṛi)ddhi-pravarddhamānam=ā-chaṁdr-ārkka-tāraṁ baram sa-

3 luttam-ire || tat-pāda-padm-ōpajīvi || Samadhigata-paṁcha-mahā-śabda-mahāmaṇḍalēśvaraṁ samara-Maha(hē)śvaraṁ sau(śau)ryya-kaṇṭhīravaṁ raṇa-raṁga-Bhairava[ṁ] bhṛitya-chiṁtāmaṇi

4 subhaṭa-si(śi)rōmaṇi satya-Rādhēyaṁ sau(śau)ch-Āṁjanēyaṁ bhuvan-ābhirāmaṁ sāhas-ōddāmaṁ svāmi-saṁnnāhaṁ budha-jan-ōtsāhaṁ **Chōḷa**-baḷa-jaḷadhi-Baḍav-ānaḷaṁ **Bhōja-**

5 kāḷ-ānaḷaṁn=ubhaya-baḷ-āchāryyaṁ Mandara-dhairyyaṁ śrīmad-**Āhavamalla-dēvara** vagga nām-ādi-samasta-prasa(śa)sti-sahitaṁ śrīman-mahāmaṇḍaḷēśvaraṁ **Jēma-**rasaṁ **Poṭṭiyū-**

6 **r=Elavaṭṭi Niṭṭasiṁgi Haṇḍiyūra** modal=āge palavuṁ bāḍaṁgaḷaṁ kuttuṁbittiyan=aṇugu-jīvitadin=āḷuttav-ire | tat-tanūjaṁ || Samadhiga-

7 ta-paṁcha-mahā-sa(śa)bda-mahāsāmantaṁ vīra-lakshmī-kāntaṁ mēdinī-mallaṁ ripu-hri(hṛi)daya-sellan=ayyana gaṁdha-vāraṇaṁ vairi-saṁhāraṇaṁ kumara-Nara-Nārasiṁ-

8 ga nām-ādi-samasta-prasa(śa)sti-sahitaṁ śrīman-mahāsāmaṁntaṁ **Jōyiyarasaṁ** kumāra-vri(vṛi)ttiyiṁ **Poṭṭiyūran=āḷuttam-ire** || Samasta-bhuvana-jana-vinuta-pada-payō-

9 ja-Paramēśvara-Hara-Dhar-āṁganā-prasād-ōtpādita-vilōḷa-bhāḷ-ēkshaṇa[2] kshamādhar-ēn-dra-ruṁndra-si(śi)khara-saṁsthāpita-śakṭi vyakta-bhuja-nij-ānushṭhit-āshṭādas(ś)-āsva(śva)-

10 mēdha viluḷita-sit-ātapatra-traya-virājamāna mahim-ādy-anēka-sāṁmnā(mrā)jya-rājaka-virājita-pavitra-kshatra **Kādaṁba**-kuḷa-bhūshaṇa

11 perṁmaṭṭi-tūryya-nirgghōshaṇaṁ samadhigata-paṁcha-mahā-śabda-mahāmaṇḍaḷēsva(śva)-raṁ **Banavāsi-puravar-ēsva(śva)raṁ** mā[r*]-kkoḷvara gaṇḍaṁ **Malege** mārttaṇḍa[ṁ]

[1] From the ink-impression.

[2] Apparently some word like *prasūta* is missing hereabouts.

12 satya-nity-ōdayaṁ śauch-Āṁjanēyaṁ gondaḷa-Chaturmmukhaṁ ṣaṁara-mukha-Shaṇmukhaṁ kanduka-Sahasrabāhu saṁgrāma-Rāhu para-garuḷi-Parasu(śu)-Rāmaṁ biruda-ka-

13 * * Bhīman=aras-aṁka biruda-baṁgāṛam=**Mērugan=aṁkakāṛa** sāhas-ōttuṁga **Harigana siṁga** nām-ādi-samasta-prasa(śa)sti-sahita[ṁ] śrīman-mahāmaṇḍa-

14 ḷēsva(śva)raṁ **Tōyima-dēvar=Vvanavāsi-pamnirchchhāsiramuma**[ṁ*] **Pānuṁgall=aynūruvaṁ** sukha-saṁkatā(thā)-vinōdadin=āḷd=arasu-geyyuttam-ire || Kaṁda |

15 Ā nāḍoḷ=akhiḷa-ghaṭik[ā*]-sthānav=id=enisittu **Poṭṭiyūr**=adaṛal sallīna-mati **Māran=**uchita-vachō-nidhi gāvuṇḍa-sāmyadoḷ sukhav=irḷda(ḷda) || ₒ[1*] Vri(vṛi)tta ||

Kuḍuva-

16 r=vvēḍidoḍ=artthig=artthi(rttha)-chayamaṁ śrīmaṁtar=uṁt=ēnumaṁ kuḍar=ī lōkadoḷ=ond=apūrvvav=enisal=kāl=illadar=vvēḍi bandaḍe kālam nija-śaktiyiṁ palargge(rge) goṭṭaṁ **Māra-Gāvuṇḍa-**

17 **n**=endaḍe tat-sat[t*]vada tat[t*]vad=uṁnatiyan=aṁt=iṁt=uṁt=[e*]nal=bērkuvē[1] || [2*] Guṇadoḷam=aḷavinoḷaṁ Manug=eṇey=ene peḷavaṁge kālan=ittudariṁ **dakshiṇa-Sōmanādha(tha)n**=ene dhāriṇī-

18 taḷaṁ negaḷdan=alte **Māran**=udāraṁ || [3*] Iṁtu par-ārtthavuṁ purush-ārtthamuṁ berasu **Gōḍuvara Māra-Gāvuṇḍaṁ** gāvuṇḍu-geyyutt-ire || tat-tanūbhavaṁ || Jaḷanidhiyo-

19 ḷ=uḍupan=uday-āchaḷadoḷ=inaṁ puṭṭuv=ante vol **Gōḍuva**-sat-kuḷadoḷ=udi(da)yisi su-putraḥ(ṁ) kuḷad=iḍ[u*]k[e*]y=enisi **Kēsi** jaśamaṁ paḍedaṁ || [4*] Samasta-lō-

20 ka-stūyamān-ānēka-guṇa-gaṇ-ādhāraṁ para-nārī-dūraṁ haya-Vatsa-rājaṁ gaṇikā-Manōjaṁ Mārana chakrana nyāya-chakraṁ sthiti-sāra-samudraṁ kadan-aika-Rudraṁ ē-

21 kāṁga-vīraṁ Vīr-āvatāraṁ chalake bal-gaṇḍaṁ vairi-bhēruṁṇḍaṁ para-bala-Pārttharh naḍu-nāḍa tīrttharh dāna-chiṁtāmaṇi vibudha-rakshāmaṇi Sōmēśvara-dāsi vinaya-viḷāsi

22 vairi-Nārāyaṇaṁ nām-ādi-samasta-prasa(śa)sti-sahitaṃ śrīmach-**Chāḷukya-Gaṁga-Vermmāḍi Kēsa(śa)va-Gāvuṇḍaṁ** nāḷ-prabhutvadiṁ **Poṭṭiyūrg**ḷ**e** gāvuṇḍu-geyyuttav-iḷdu ||

23 Vri(vṛi)tta || Paḍedaṁ **Kādamba-vaṁs**(ś)-āgraṇi-**Hariga-mahi**(hī)pāḷanoḷ chāmar-aughaṁ guḍi chaukaṁ bhēri saṁkaṁ baruhi-bahaḷa-piṁchhātavaṁ[2] vāraṇaṁ beḷ-goḍey=eṁb=ī rājya-chi-

24 hna-brajaman=udita-tīvra-prabhā-bhāsi tān=endaḍe hu(hō) bāpp=appud=iṁt=ī bhuvana-bhavanadoḷ **Kēsi**-tējō-viḷāsaṁ || [5*] Magan=enag=ītane **Chāḷukya-Gaṁga-Vermmāḍiy**=endu

25 pesar-ggo(go)ṭṭaṁ **Kēsige** mechchi nachchi **Chāḷukya-Gaṁga-Vermmāḍi**-nri(nṛi)paṁ[3] || [6*] Param-ōtsāhadin=ittan=uttama-sita-chchhatr-āspadaṁ hēma-chāmara-yugmaṁ guḍi vīra-bhēri si(śi)-

26 khi-piṁcha(chha)-[ch*]chhatram=eṁd=iṁt[u*] **Gaṁgara Chāḷukyara** rājya-chihna-chayamaṁ śri-**Vikramāditya-bhūdharan**=eṁb=unnati **Kēsirāja**-vibhuviṁg=akku[ṁ] peṛaṁg=ak[k*]uv=ēṁ || [7*] Vri(vṛi)tta |

27 Udaka-svarṇṇa-chay-āṁnnā-dāna-guṇadiṁ gō-dānadiṁ bhūmi-dānadin=ukṣha-brajā-dānadiṁ vividha-vidyā-dānadiṁ nitya-dānadin=udyat-tiḷa-dānadi[ṁ] nikhiḷa-

[1] For *bēḷkumē*? [or *barkumē*.—H. H. S.].

[2] The *va* is not clear. Read *-piṁchh-ātaṇ-āvāraṇaṁ*.

[3] This verse is two feet short in the last *pāda*. [Perhaps the syllables *Vikra-mādity* are omitted before the word *nṛipaṁ* —H. K. S.]

28 kanyā-dānadiṁ tushṭi-māḍidan=utukri(kṛi)shṭa-janakke **Kēsa(śa)van**=id=ēṁ sad(ch)-chitta-saṁpannanō || [8*] Praṇat-ābhīshṭa-pa(pha)ḷa-pradātanan=aghu(gha)-pradhvaṁsiyaṁ bhōgi-bhūshaṇa-

29 naṁ **Sa(śa)**ṁkaranaṁ pratishṭi(shṭhi)si mahā-sāvāsamaṁ puṇya-pūraṇamaṁ pūjitamaṁ śīḷā-rachitamaṁ rārājit-ōttuṁga-tōraṇavaṁ māḍisi **Kēsi** bhāsura-yaśa[ś*]-śrī-kānte(nti)-

30 yaṁ tāḷdidaṁ || [9*] Intu **Poṭṭiyūra Permmāḍi Kēsi Gāvuṇḍanuṁ** mūvadiṁbaruṁ sukhadin=ire || Svasti **Si(śa)ka-nri(nṛi)pa-kāḷ-ātīta-saṁvatsara-sa(śa)taṁga**[ḷ*] **888neya Parābhava-samvatsa-**

31 **rada Paushya-su(śu)ddha puṇṇavey=Ādityavāraṁ Hasta-nakshatram**=uttarāyaṇa-saṁkrāntiyuṁ vyaṭīpātadaṁdu mahāsāmanta · **Jōyiyarasaruṁ** mahāmaṇḍaḷēsva(śva)raṁ **Tōyima-dēva-**

32 nuṁ **Mailala-dēviyaruv**=iḷdu **Poṭṭiyūra Permmāḍi Kēsi Gāvuṇḍana** māḍisida kerey=ēriya mēgaṇa Kēsavēsvara[1]-dēvargge biṭṭa dharmmav=ent=eṁdaḍe dēgulada sote-suṇṇakkaṁ pu(pū)j[ā]-

33 rigaṁ[2] dēvargge gaṁdhakkaṁ dhūpakkaṁ dīpakkaṁ nivēdyakkaṁ paṛekāṛa[r*]ggaṁ pātrakkam vaṁsigargga[ṁ*] | **Kōvagereyiṁ** paḍuval eleya kāvaṇadiṁ baḍagal | nālku mattar=kkeyyumaṁ **Poṭṭiyū-**

34 **ra** mēl-āḷkeya poge-vogeya manege paṇavuṁ pāgada tereyumaṁ manneya sāmyada mane-vaṇa-vi(?chi)ṇa-tereyumaṁ śrī-Kēsa(śa)vēśvara-dēva[r*]gge dēva-pūj-ānanta-

35 raṁ pada-baradoḷ dhārā-pūrvvakadin=ā-cha[ṁ]dr-ārkka-tāram baraṁ biṭṭar || **Tōyima-dēvar=abbegaḷ** śrīmad-**Akkā-dēviyaru** tapō-niyama-japa-samādhi-śīla-saṁpa-

36 nneyar=appa tapaśvi(svi) **Gaṁgikabb**[e*]**gaḷa** kālaṁ karchchi dhārā-pūrvvakadiṁ maṭhada vidyā-dānakke tava(ma)ge naḍeva aṁdi[3]-garchcha kāṇikeyav=eraḍu gadyāṇada tereyaṁ tat-kā-

37 ladol biṭṭaru || Ī maṭhaṁ * * [ta]pōdhana-sthānav=ī dharmmamaṁ gāvuṇḍanuṁ mūvadiṁbaruv=eleya bojaṁgar nūṛa-nālvaruṁ ugura-mūnūrvvaruṁ taṁbuli-

38 ga-sāsirvvaruṁ mūṛuṁ nāḍa suṁkigaruv=int=inibaruṁ dātārar=āgi pratipālisuvar || Ī dharmmavaṁ kāda mahā-purushaṁge Vāraṇ[ā*]siyoḷ sāsira kavileya

39 kō[ḍuma]m koḷagumaṁ paṁcha-ratnaṁgaḷiṁ kaṭṭisi chatur-vvēda-pāragargge ubhayamukhi-goṭṭa phalav=akuṁ Idan=aḷid-ātaṁge Vāraṇāsiyoḷ sāsira ka-

40 [vile]yuṁ sāsirvvar brāhmaṇarumaṁ konda mahā-pātakav=aku[ṁ] || Sāmānyō=yaṁ dharmma-sētur=nri(nṛi)pāṇāṁ[4] kālē kālē pālanīyō bhavadbhi[ḥ*] [|*] sa-

41 rvvān=ētāṁn bhāginaḥ=pārtthivēṁdrā[n*] bhūyō bhūyō yāchatē Rāmabhadra[ḥ*] || [10*] Sva-datt[ā*]ṁ para-datt[ā*]ṁ vā yō harēti(ta) vasuṁndharā[ṁ*] [|*] shashṭir=vvarsha-sahasrāṇi vishṭā(shṭhā)yāṁ

42 jāyatē kri(kṛi)miḥ || [11*] Svaṁ dātuṁ sumahat=sakyaṁ[5] klēśam=anyatra(sya) pālanaṁ [|*] dānaṁ vā pālanaṁ v=ēti dānā[ch*]=chhrēyō=nupālanā(naṁ) || [12*]

---

[1] Read *Kēśavēśvara-*.

[2] These two syllables have been omitted, and then added before the beginning of the line.

[3] Apparently for *aḍi-*.

[4] The engraver has written *nre*, with the vowel *i* on top of the *e*.

[5] Read *sumahach=chhakyaṁ*.

43 Sphu[rita]-vachō-vibhāsi-chaḍu(ṭu)-vāni(ṇi)ya[1] sat-kavi **Rājavallabhaṁ** virachi-sidaṁ vivēka-nidhi paṭṭal[⏑ — ⏑ ⏑ — ⏑ —]ṁgiyiṁ baredan=ida[ṁ*] savistarisi tirddida

44 vāk-pati **Cha[ṁ]dra-bhaṭṭaruṁ** guruṁ(ru) **Baḍa(ḷa)bhadra-dēvaruv=id=ĕṁ** trijagad-guruv=āyto sā(śā)sanaṁ ‖ [13*] **Dāsōjaṁ** besa-geydaṁ maṁgaḷa ‖

TRANSLATION.

(Lines 1-3.) When the victorious reign of—hail!—the asylum of the whole world, favourite of Fortune and Earth, great Emperor, supreme Lord, supreme Master, ornament of **Satyāśraya's** race, embellishment of the **Chāḷukyas**, king **Traiḷōkyamalla-Āhavamalla**, was advancing in a course of successively increasing prosperity, (*to endure*) as long as moon, sun, and stars :—

(Lines 3-6.) While one who finds sustenance at his lotus-feet, the Mahā-Maṇḍalēśvara who has obtained the five great musical sounds, possessing all titles of honour such as "a Mahēśvara in the fray, a lion in valour, a Bhairava on the stage of battle, a wishing-gem to servants, a head-jewel of men of valour, a Rādhēya [Karṇa] in truthfulness, an Āñjanēya in purity, delightful to the world, mighty in boldness, an armour to his lord, giving bounty[2] to sages, a submarine fire to the ocean of the **Chōḷa's** host, a flame of doom to **Bhōja**, a teacher of both forces,[3] having the firmness of Mandara, the tiger of king **Āhavamalla**," the Mahā-Maṇḍalēśvara **Jēmarasa**, was ruling over many towns,—beginning with **Poṭṭiyūr, Elavaṭṭi, Niṭṭasiṅgi**, and **Haṇḍiyūr**,—and *kuṭṭumbitti*, as a love-fief[4] :—

(Lines 6-8.) While his son, the Mahāsāmanta who has obtained the five great musical sounds, bearing all titles such as "beloved of warriors' Fortune, wrestler of earth, shaft in foemen's hearts, his father's rutting elephant, causing destruction of enemies, a Nārasiṅga [Vishṇu-Kṛishṇa], to princely Naras," the Mahāsāmanta **Jōyiyarasa**, was ruling **Poṭṭiyūr** as a prince's fief :—

(Lines 8-14.) While he who is an ornament of the **Kādamba** race [which is descended] from the hero of the bright frontal eye [Trilōchana Kadamba] who sprang from the grace of the supreme Lord Hara, whose lotus-feet are praised by the peoples of all the world, and of the lady Earth; which (*race*) has established its might on the massive peaks of the King of Mountains[5]; which (*race*) has performed eighteen horse-sacrifices by the manifest quality of its arms; which is resplendent with three fluttering white parasols; which has its pure chivalry illuminated by many royal attributes of empire such as dignity, etc.—he who is (*saluted*) with the noise of *permaṭṭi* drums and (*other*) musical instruments, the Mahā-Maṇḍalēśvara who has obtained the five great musical sounds, **lord of Banavāsi** best of cities, bearing all titles of honour such as "man of might to adversaries, sun to the **Highlands**, ever active in truth, Āñjanēya in purity, Brahman in assemblies, Shaṇmukha in the front of battle, Thousand-armed [Kārtavīrya] with balls,[6] Rāhu in the fray, Paraśu-Rāma to the resorts of foes, . . . of titles, bearing the royal stamp (?) of a Bhīma, *baṁgāra* of title-bearers, **warrior to Mēruga**, exalted in high spirit, **lion of Hariga**," the Mahā-Maṇḍalēśvara **Tōyima-dēva**, was reigning in the

[1] This reading is rather uncertain.

[2] See above, Vol. XIV, p. 189.

[3] Infantry and mounted troops? [The two opposing troops.—H. K. S.]

[4] I understand this as more or less equivalent to the term *prīti-goḍagi* in *Ep. Carn.*, XII. (Tumkūr), Ck. 2; see Kittel, p. 1706, s.v. *aṇugu*.

[5] See above, Vol. XIII, p. 173, and ref.

[6] This seems to mean that he tosses about his enemies' heads like balls in such numbers that he appears to have a thousand arms.

government of the **Vanavāsi Twelve-thousand** and the **Pānuṅgal Five-hundred** with enjoyment of pleasant conversations :—

(Verse 1.) This **Poṭṭiyūr** is a general *ghaṭikā-sthāna*[1] in the county ; in it **Māra**, composed of mind, a treasure of becoming speech, has dwelt happily in the office of Gāvuṇḍa.

(Verse 2.) The wealthy, when entreated, may give abundant substance to the needy, (*but*) they do not give in this wise anything unique and unprecedented in this world ; whereas, when footless men came with entreaties, **Māra Gāvuṇḍa** by his own power gave feet to many. Hence is it needful to tell in this and that wise the high degree of the quality of his goodness ?

(Verse 3.) As the earth spoke of him as a peer of Manu in virtue and power, as a **southern Sōmanātha**[2] because of his giving feet to the lame, **Māra** in truth was illustrious, a noble man.

(Line 18.) While **Gōḍuvara Māra Gāvuṇḍa**, thus combining philanthropy with worldly success, was acting as Gāvuṇḍa ;—his son,—

(Verse 4.) As the moon is born from the ocean, the sun from the Eastern Mountain, **Kēsi**, a worthy son arising in the goodly family of the **Gōḍuvas**, won fame as an ornament of his race.

(Lines 19-22.) While he who bears all titles of honour such as " basis of the series of many virtues praised by all the world, remote from others' wives, a king Vatsa with horses,[3] a Cupid to public women, a discus of justice to the troop of Māra,[4] an ocean of the essence of order, a unique Rudra in warfare, a warrior of the bodyguard, an incarnation of Vīra [Vīrabhadra], a mighty man of valour in courage, a *bhēruṇḍa*[5] to foes, a Pārtha [Arjuna] to hostile armies, a site of salvation in the centre of the country, a wishing-gem of bounty, a protective gem to sages, servant of Sōmēśvara, brilliant in culture, a Nārāyaṇa to foes," **Chāḷukya-Gaṅga-Vermāḍi Kēśava Gāvuṇḍa**, was acting as Gāvuṇḍa over **Poṭṭiyūr** in the county-shrievalty :—

(Verse 5.) He received from king **Hariga**, the head of the **Kādamba** race, many tokens of royalty, to wit, a number of yak-tail fans, a flag, a palace,[6] drums, conches, parasols of many peacock-feathers, and a white parasol, (*so that he became*) radiant with manifested intense lustre : for this reason, oh bravo ! thus was the brilliance of **Kēsi's** distinction in the abode of this world.

(Verse 6.) The king **Chāḷukya-Gaṅga-Vermāḍi [Vikramāditya]**, pleased with **Kēsi** and loving him, said " this man is to me a son, **Chāḷukya-Gaṅga-Vermāḍi**," and gave him that name.

(Verse 7.) With supreme generosity the blest king **Vikramāditya** gave the various royal emblems of the **Gaṅgas** and **Chāḷukyas**, to wit, the honour of the excellent white parasol, a pair of golden yak-tail fans, a flag, warriors' drums, a parasol of peacocks' feathers : this distinction comes to the lord **Kēsirāja** ; does it come to any other man ?

(Verse 8.) By the merits of gifts of water and a quantity of gold and food, by gifts of kine, by gifts of land, by gifts of herds of oxen, by gifts of divers kinds of knowledge, by constant gifts, by gifts of excellent sesam, by gifts of all (*kinds of*) maidens **Kēśava** has gratified distinguished men : truly he possesses a right mind.

---

[1] This term (cf. *Ep. Carn.*, VII. i. Sk. 94, X. i. Kl. 170, XII. Si. 23 ; *Progress Report of Asst. Supt. Epigr., Southern Circle*, 1912-13, p. 99 ; *I. A.*, Vol. XIV, pp. 19, 25 n.) is still not quite clear ; but it seems to mean the official meeting-place of learned and godly men, and thus is connected with *ghaṭige* and *ghaḷige* in the meaning of " assembly," on which see my note on the Kaḷas inscription above, Vol. XIII, p. 327 n.

[2] See above, inscr. B.

[3] See above, Vol. V, p. 236 n.

[4] The spirit of carnal temptation. [Māra has here a possible reference to Māra-Gāvuṇḍa, the father of Kēśava-Gāvuṇḍa. In this case the text *Mārana chakrana nyāya-chakraṁ* can be divided *Mārana chakran=anyāya-chakraṁ* and translated " the discus of Māra-[Gāvuṇḍa] and a discus to (*destroy*) injustice. "—H. K. S.]

[5] A fabulous two-headed bird.

[6] *Chauka* is from Skt. *chatushka* (Pkt. *chaukka*) ; for the sense of "palace" cf. *Kumāra-sambhava* V. lxviii., VII. ix.

(Verse 9.) Having consecrated Śaṅkara, the giver of fruits desired by his worshippers, the annihilator of guilt, the wearer of ornaments consisting of snakes, (*and*) having constructed a great abode perfect in holiness, worshipful, built of stone, and made with brilliant lofty archways, **Kēsi** has enjoyed the beauty of the goddess of radiant glory.

(Lines 30-35.) Thus **Permāḍi Kēsi Gāvuṇḍa** of **Poṭṭiyūr** and the Thirty being in happy estate,—hail!—on **Sunday, the full-moon day of the bright fortnight of Paushya in the cyclic year Parābhava, the 988th** (*year*) **of the centuries lapsed since the time of the Śaka king,** under the constellation **Hastā** at the *uttarāyaṇa-saṁkrānti*, in the *vyatīpāta*,[1] the Mahā-sāmanta **Jōyiyarasa** and the Mahāmaṇḍalēśvara **Tōyima-dēva** and **Mailala-dēvi** jointly granted a religious foundation to (*the temple of*) the god Kēśavēśvara above the bank of the tank constructed by **Permāḍi Kēsi Gāvuṇḍa** of **Poṭṭiyūr**, as follows:—for plastering of the temple, for an officiant priest, for the god's scents, incense, lamps, and oblations, for drummers, a dancing-woman, and flute-players, they granted in the *pada-bara* with pouring of water to the god Kēśavēśvara after worshipping the god a field of four *mattar* west of **Kōvagere**, north of the betel-sheds, and the tax of a *paṇa* and a quarter on the . . . house belonging to the magistracy of **Poṭṭiyūr**, and the petty (?) tax on houses under seigniorial authority, for as long as moon, sun, and stars.

(Lines 35-38.) **Akkā-dēvi, the mother of Tōyima-dēva,** having laved the feet of the ascetic lady **Gaṅgikabbe,** who practises austerities, minor disciplines, prayer, and absorption, at the same time granted with pouring of water for the dispensation of teaching at the monastery the tax of two *gadyāṇa*, the fee for washing the feet, which (*hitherto*) had accrued to her. This monastery . . . establishment of ascetics, this pious foundation the Gāvuṇḍa, the Thirty, the hundred and four *Bojaṅgas* of the betel-gardens, the three-hundred *Uguras*,[2] the thousand sellers of prepared betel, and the three controllers of the taxes of the county shall protect as donors.

(Lines 38-40 : a prose formula of the usual type.)

(Verses 10-12 : three common Sanskrit verses.)

(Verse 13.) **Rājavallabha,** a good poet of clever speech brilliant with bright words, a treasure of discretion, composed . . . . . wrote it; it was **Chandra Bhaṭṭa,** lord of language, and the Master **Baḷabhadra-dēva** who amplified and corrected it. Truly this edict has become a teacher to the three worlds.

(Line 44.) **Dāsōja** executed the order. Happiness!

No. 12.—THE JAMBUKESVARAM GRANT OF VIJAYARANGA CHOKKANATHA NAYAKA: SAKA 1630.

BY S. V. VISWANATHA, M.A., TRICHINOPOLY.

This inscription is on a single copper-plate bored at the top. It was kindly given for examination by the Śaṁkarāchārya of the Kumbhakōṇam *maṭha*. I edit the inscription from inked impressions of the plate prepared by me.

The plate has a semi-circular curvature at the top, including which it measures 10 in. in height and 6·3 in. in breadth. It is in good preservation. It contains 46 lines in all, including the signature at the bottom and *Śrī-Chaṁdramauḷīśvara-svāmi* at the top of the first side. The inscription, which runs across the breadth of the plate, is legible and is in prose. The semi-circular portion of the plate at the top is worth notice. It contains an illustration which may

[1] A *yōga* in which the declination of the sun is equal to that of the moon.

[2] See above, Vol. XIII, p. 15 and n.

be taken to convey to us the traditional history regarding the origin of the god Jambukēśvara in Trichinopoly. The illustration itself includes the figures of the sun and the moon, a tree supposed to take its root from the head of a devotee seated below with folded hands (*añjali*) in the *vīrāsana* posture, a *liṅga* placed on a pedestal underneath the tree, an elephant with its trunk raised over the *liṅga*, a spider-like creature flying above the *liṅga* and a goddess standing on the right. The figures of the sun and the moon are perhaps indicative of the overlordship of the Vijayanagara house over the Nāyakas of the south, the sun and the moon being found on the seal and coins of the Vijayanagara kings.[1] There is a belief, as recorded in the *Sthalapurāṇa* of Jambukēśvaram, that the place was called after *Jambūka Muni*, from whose head the *jambūka* tree had its origin. The elephant and the spider, it is believed, worshipped the *liṅga* representing the God Jambukēśvara and attained salvation. The *liṅga* on the pedestal is the god of Jambukēśvaram, and the goddess represented as standing on the right side is probably Akhilāṇḍēśvarī.

The language of the inscription is Telugu and Sanskrit combined. Lines 1-3, which contain the epithets of the donee, are in Sanskrit. Lines 4-35 are in Telugu, and lines 35-44 are in Sanskrit, containing the admonitory verses at the end of the plate. The characters of the inscription are Telugu.

There are a few orthographical peculiarities worth noticing. There is an unnecessary reduplication of consonants in °*maṁddu* (l. 15); *naḍipiṁchcha*° and *ājñāpiṁchchi*° (l. 18); °*māṁgalaṁllō* (l. 22); °*puraṁllō* (l. 23); *Jeṁbbukēśvaraṁ* (l. 28); *vrāyiṁchchi* (l. 33) and *anubhaviṁchchu* (l. 34). Instances of dravidianised forms of Sanskrit words are seen in °*tāṁbra*° for °*tāmra*° (l 21); °*sāṁbrājyaṁ* instead of °*sāmrājyaṁ* (l. 9) and *vubhaya* in the place of *ubhaya* (30-1).

The inscription records the grant of lands in certain villages in the Trichinopoly district and some lands on both sides of the Kāvērī river for the conduct of worship, offerings and charities in the Śaṁkarāchārya *maṭha* at Jambukēśvaram (Tiruvānaikāval), where even now the head of the Kumbhakōṇam *māṭha* has his residence for a portion of the year. The grant was made by Vijayaraṅga Chokkanātha Nāyaka at the instance of the then presiding *guru* of the *maṭha*. The name of the latter is not explicitly given in the grant. He is styled *Lōkaguru Śrīmad Śaṁkarāchārya Svāmulavāru*.

The objects for which the grant was made were *annadāna kaṭṭaḷa* (endowment for gift of food) and the *naivēdya* which was to be offered to the god. For the former purpose certain lands were granted. These were situated in Mahēndramaṅgalam, Kṛishṇāpuram, Kāraikkāḍu, Koṇḍayaṃ ēṭṭai, Maṅgamāmbāpuram, Ariyūru and Āriyamaṅgalam. For the *naivēdya*, which was to include four measures (*paḍi*) of cooked rice, *dōśai*, *atirasa*, *sugiya* and *dīpaṁ chamaru* (oil for lights),[2] it was ordered that certain tolls collected should also be assigned.

The grant is dated Śaka 1632, Vikriti, Kārtika, Śuddha, full moon, Monday, Rōhiṇī-*nakshatra*.

Vijayaraṅga Chokkanātha and his line are said to belong to the *Dakshiṇa-siṁhāsana*, styling themselves *Dakshiṇa-siṁhāsan-ādhyakshāḥ* ('Lords of the southern throne'). They were viceroys in the south, acting under the kings of Vijayanagara. They were lords of the regions of the Pāṇḍyas, comprising Madura and Tinnevelly districts. The circumstances under which the Nāyakas became rulers of the south are recorded thus.[3] In 1558 "the then Chōḷa ruler

[1] [The symbols of sun and moon are quite common in all Chalukya inscriptions also. They are not peculiarly the symbols of the Vijayanagara royalty. These in my opinion indicate the *ā-chandr-ārka-sthāyitā* of the gift conveyed by the document over which they are engraved.—H. K. S.]

[2] *Dīpam chamaru* is the supply of oil for lamps in addition to the offerings which were to be made to the god.

[3] See *Gazetteer of the Madura District*, Vol. I, p. 41.

invaded the Madura country and dispossessed the Pāṇḍya king. Whereupon the latter appealed to the Court of Vijayanagar, and an expedition under a certain Nāgama Nāyakkan was accordingly sent to his aid. Nāgama easily suppressed the Chōḷa king and possessed himself of Madura; but he then suddenly threw off his allegiance and, declining to help the Pāṇḍya, assumed the position of an independent ruler. The Vijayanagar emperor was furious at his defection, summoned a council, laid the matter before his most faithful officers, and cried out to the assemblage, 'Where amongst you all is he who will bring me that rebel's head?'" Viśvanātha, the son of Nāgama, promised this, captured his father in battle and placed him in confinement, only to be released later on. The Pāṇḍya king nominally held sway over Madura, but the new Nāyaka régime "developed first into a governorship, which became hereditary, and then into what was practically a hereditary monarchy." The Nāyakas "were content with the position of lieutenants under Vijayanagar; but in essentials their sway was practically absolute and the Pāṇḍyas disappear in effect henceforth from history."

The general character of the administration of the Nāyaka kingdom of Madura is thus dwelt on by Caldwell[1]:—"Their reigns record little more than a disgraceful catalogue of debaucheries, treacheries, planderings, oppressions, murders and civil commotions, relieved only by the factitious splendour of gifts to temples, idols and priests, by means of which they apparently succeeded in getting the Brahmans and poets to speak well of them, and thus in keeping the mass of the people patient under their misrule."

The genealogy of the Nāyaka dynasty of Madura, so far as known, may be given thus[2]:—

1.	Nāgama.	
2.	Viśvanātha I.	1559—1563
3.	Kumāra Kṛishṇappa	1563—1573
4.	Kṛishnappa *alias* Periya	1573—1595
5.	Vīrappa and Viśvanātha II.	
6.	Lingayya *alias* Kumāra Kṛishṇappa Viśvappa *alias* Viśvanātha III.	1595—1602
7.	Muttu Kṛishṇappa	1602—1609
8.	Muttu Vīrappa	1609—1623
9.	Tirumala	1623—1659
10.	Muttu Aḷakādri *alias* Muttu Vīrappa	1659—1662
11.	Chokkanātha *alias* Chokkaliṅga	1662—1682
12.	Raṅga Kṛishṇa Muttu Vīrappa	1682—1689
13.	Maṅgammāḷ	1689—1704
14.	Vijayaraṅga Chokkanātha	1704—1731
15.	Mīnākshī	1731—1736

Our record states the genealogy from Chokkanātha (No. 11 of the above list) downwards, and Vijayaraṅga Chokkanātha is styled a descendant of Viśvanātha (probably I), the real founder of the Nāyaka kingdom of Madura. He was the son of Raṅga Kṛishṇa Muttu Vīrappa Nāyaka, and in his early years from 1689—1704 Maṅgammāḷ, his grandmother, acted as regent. She was an able and charitable woman, and under her "Madura apparently all but regained the proud position it had held in the days of Tirumal." Vijayaraṅga Chokkanātha took charge of the administration from 1704 and ruled till 1731. He was a weak ruler, "was vain and weak-minded and unfit to govern himself or others. His reign was distinguished by the ill-regulated and extraordinary munificence of his gifts to Brahmans and religious institutions. The injustice of his rule caused a serious riot in Madura, the mutiny of the whole of his troops and incessant internal commotions."[3]

[1] *History of Tinnevelly*, p 62.

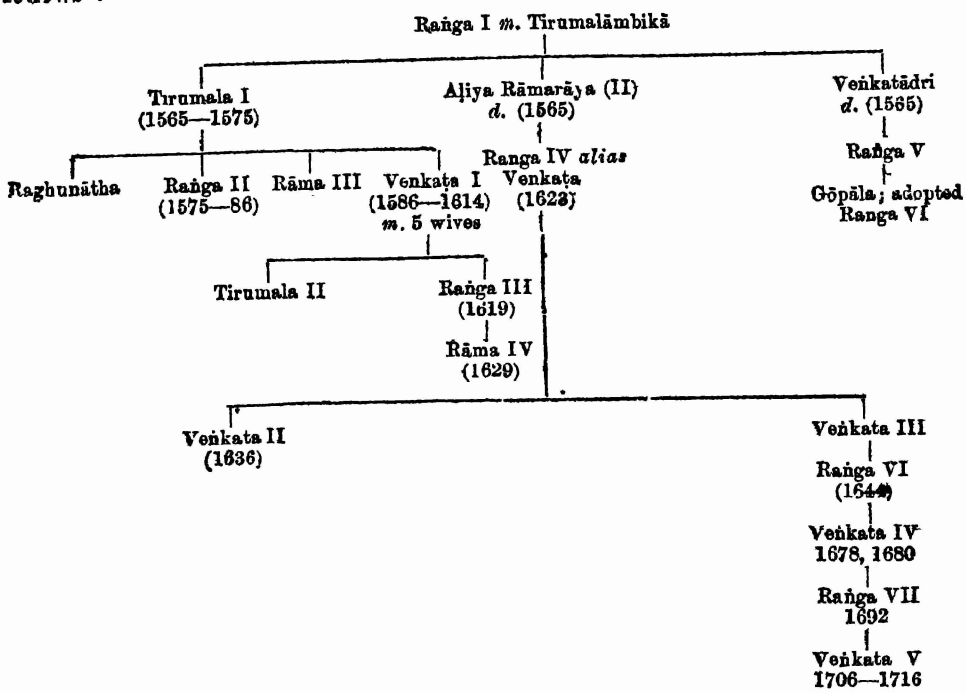
[2] See *Madura District Gazetteer*, I; also 'The Naik Kingdom of Madura' in the *Ind. Ant.*, 1916, p. 18.

[3] *Madura District Gazetteer*, Vol. I, p. 56.

In 1725 he entered into a war with Tanjore over the question of succession to the throne of Ramnad, in which the Raja of Tanjore obtained a decisive victory. He died in 1731, and was succeeded by an adopted son. Mīnākshī, his queen, acted as regent. It was during her time that a quarrel broke out between her and Vaṅgāru Tirumala, the father of the adopted son. It was at this time that the Nawab of Arcot sent two of his generals to collect tribute from Madura. The kingdom divided in itself, fell an easy prey to the invader, and from 1736 the Nāyaka kingdom of Madura ceased to exist as such.

We are told in the inscription that Vijayaraṅga Chokkanātha Nāyaka was ruling in the south when a certain Veṅkata-dēva Mahārāya, his overlord, was the rājā of Vijayanagara, ruling from his capital Ghanagiri. He is styled Rājādhirāja and Vīrapratāpa and is said to have his seat at Ghanagiri, which has been identified with Penukoṇḍa.

The genealogy of the third Vijayanagara dynasty, as made out from inscriptions, runs as follows[1]:—



According to the above table Veṅkaṭa *alias* Veṅkaṭa V has been assigned by Mr. Sewell the dates 1706—1716. He is fourth in the line from Raṅga VI (1644 A.D.). The date of the present grant is 1630 Śaka=1708 A.D.,[2] which falls within the dates of Veṅkaṭa V. Thus the Veṅkaṭa-dēva Mahārāya of our inscription, who is mentioned as the overlord of Vijayaraṅga

[1] See *Epigraphia Indica*, Vol. III, p. 238, and Sewell's *A Forgotten Empire*, Ch. XVII, pp. 222 f.

[2] [Mr. T. A. Gopinatha Rao, who has published the plate in his volume of *Copper-plate Inscriptions of the Kāmakōṭi-pīṭha*, has given an incorrect reading of the date, which the Editor has adopted but which he could have easily detected from the citation of the cyclic year Vikṛiti. It is inexplicable how Mr. L. D. Swamikannu Pillai also should have overlooked the error, in calculating the date for Mr. Gopinatha Rao, on p. 101, *ibid.* Pandit K. Venkatasubbayya of the Municipal High School, Ootacamund, has kindly calculated the date according to the *Arya-Siddhānta* and finds that the date, correctly read as Ś. 1632 Vikṛiti, Kārttika śu. 15, Monday, Rōhiṇī, corresponds to A D. 1710, Nov. 14. The full-moon *tithi* of Kārttika fell on Monday and lasted for 45 *gh.* 51 *vigh.*, or 18 hours and 20 minutes from sunrise, and the *nakshatra* Rōhiṇī was also current at sunrise and lasted till 10 *gh.* 28 *vigh.*—H. K. S.]

Chokkanātha Nāyaka, is according to the above table Veṅkaṭa V, who ruled, with Penukoṇḍa as his capital, over the domains of the Vijayanagara house.

The grant does not mention explicitly the name of the donee. It is merely stated that it was made to the *maṭha* at the instance of the then head, who is styled Lōkaguru Śrīmad-Śaṁkarāchārya-svāmulavāru.

We find, however, at the top of the first side of the plate, below the figures on the arch, the inscription *Śrī-Chandramauḷīśvara-Svāmi*. It may also be noted that there is some blank space between ll. 3 and 4 and a short space between two horizontal strokes in l. 19. Chandramauḷīśvara is the name by which the god of the Kumbhakōṇam *maṭha* is known, and the line at the top may possibly refer to the deity. We are not in a position to account for the blank spaces between ll. 3 and 4 and in l. 19. It will be seen that it would be appropriate if the name is taken as that of the Śaṁkarāchārya and is inserted between the blank spaces. This is reasonable, as out of respect for the teacher the name of the latter may not be directly mentioned by the disciple or devotee.

The tradition as regards the names of the Achāryas of the Kumbhakōṇam *maṭha* leads one to hold the above view. It is to the effect that for over two centuries the Śaṁkarāchāryas of the Conjeeveram branch have borne alternately the names *Mahādēva* and *Chandrachūḍa* or Chandramauḷi. Hence it is quite likely that the Śamkarāchārya mentioned in our inscription should have had one of these two names.

The Mēlupāka grant, dated 1608 Śaka,[1] of Mahādēvēndra Sarasvatī, the disciple of Chandraśēkhara Sarasvatī, records the fact of the grant of lands in the village of Melupāka by the former to a certain Rāma Śāstrin. The present grant is dated Śaka 1632, and it is probable that the Śaṁkarāchārya of 1632 Śaka was the one who succeeded him of 1608 Śaka.

On the foregoing grounds I hold that the name of the head of the *maṭha* at the time of the present grant was Chandramauḷīśvara, which name is inserted on the top of the first side.

The plate records a grant of land to the Śaṁkara *maṭha* at Tiruvānaikāval, and the details of the grant run as follow:—

Locality.	Amount.	Remarks.
1. Mahēndramangalam in Toṭṭiyam *sīma*	4½ half-*mās* and 1 *tāru*[2] (?).	Originally भट्टवृत्ति (?).
2. Gōpāla-svāmin's garden . . .	.....	Probably refers to the garden of the god Vēṇugōpāla-svāmin.
3. Krishnāpuram	4½ half-*mās* and 2 *tāru*.	
4. Kārakkādu	4½ *mās* and 2 *tāru*.	
5 Koṇḍayampēṭa	2 *śeys* of wet land.	
6. Mangamāmbāpuram in Tiruchchendōru *sīma*.	8 *śeys* of wet land . .	The village takes its name probably after Mangammāḷ, the famous queen.
7. Ariyūr in Tinnam *sīma* . .	16 *śeys* of wet land.	
8. Ariyamaṅgalam in the South Kō-nāḍu *sīma*.	6 *śeys* of wet land.	

The plate records also the grant of 1 *śey* of land on both banks of the Kāvērī for certain offerings to the God, and the right of collection of certain tolls for the same.

[1] Being edited in the *Ep. Ind.* by the author.

[2] 144 sq. ft. = 1 *kuḷi* : 100 *kuḷi* = 1 *mā*. *Tāru* may mean either a tree or a grove.

The places mentioned in the grant are Gajāraṇya-kshētram, Ponvāśikoṇḍān street, Mahēndramaṅgalam in Toṭṭiyam *śīma*, Kṛishṇāpuram, Kārakkāḍu, Koṇḍayampēṭa, Maṅgamāmbāpuram, Ariyūr and Ariyamaṅgalam in the South Kō-nāḍu *śīma*. Of these places the following may be identified :—

Gajāraṇya-kshētram is the same as Jambukēśvaram. The tradition of the place runs to the effect that an elephant attained bliss by worshipping the god of the place.

Ponvāśikoṇḍān street cannot be identified with any of the present day. It is connected with some of the Śaiva saints, Appar and Sambandha for instance. It was apparently a locality famous as the seat of Śaivism in Jambukēśvaram.

Toṭṭiyam *śīma* is the district round the village of Toṭṭiyam in Musiri *Tāluk*, Trichinopoly district. The place appears to take its name from the Toṭṭiyans, one of the sub-sects of the Kanarese-speaking Śūdra castes of the Coimbatore district.

Mahēndramaṅgalam is a village near Lālappēṭṭai, a railway station on the South Indian Railway between Erode and Trichinopoly. The *maṭha* of Kumbhakōṇam has still some lands there. Near this village is a temple dedicated to Vēṇugōpāla-svāmin, which with the surrounding lands is now owned by the Kumbhakōṇam *maṭha*.

Gōpāla-svāmin's *garden* probably refers to the garden of the above temple.

Kṛishṇāpuram is a small village near Mahēndramaṅgalam.

Kārakkādu is a hamlet some 5 or 6 miles from Mahēndramaṅgalam.

Koṇḍayampēṭa is the village Koṇḍayampēṭṭai near Jambukēśvaram.

Tiruchchendōru is the village Tiruchchendurai 5 miles from Trichinopoly.

Ariyamaṅgalam is also a village near Trichinopoly. It is said to have been situated in the South Kō-nāḍu district which is probably identical with the Pudukkōṭṭai State.

In lines 15-19 of the plate it is said that the Śaṁkarāchārya of Conjeeveram had his *own maṭha* in Ponvāśikoṇḍān street from *olden times*. The insertion of 'own' (स्वंत) and 'from olden times' (पूर्वं मोदलुकोनि) looks purposeful and curious; and it leads one to the suspicion whether the *maṭha* may have been originally owned by the Śaṁkarāchārya of the Kāmakōṭi *pīṭha*, or not. It has been already noted that Ponvāśikoṇḍān was a Śaiva place of resort in Jambukēśvaram. Tamil records actually engraved on the walls of the *maṭha* at Tiruvānaikāval, which according to the Epigraphist may be assigned to the 13th century,[1] state that the *maṭha* was originally built by a certain Śōḷakōṉ and was called the *Nāṟpaṭṭeṇṇāyiravaṉ-maḍam*, its priests being the descendants of Namaśśivāya-dēvar of the lineage of Tiruchchattimurṟattu-Mudaliyār. These records lead us to two inferences: first, that the Śaṁkarāchārya of Kumbhakōṇam may have come into possession of the *maṭha* at the earliest only after the 13th century; secondly, that the *maṭha* was originally built by a Śaiva devotee for his sect and must have been in the possession of the Śaiva saints at least as late as the 13th century. It is possible that a descendant of the family of Tiruchchattimurṟattu-Mudaliyār made a gift of the *maṭha* to the Śaṁkarāchārya of Conjeeveram, or it may be that the latter occupied the *maṭha* when Śaivism had declined in the locality and the *matha* was left in a ruined state. In any case the records on the walls of the *maṭha* show that it was not the Śaṁkarāchārya's स्वंत° but was originally in the occupation of the Śaiva community and the पूर्वं could refer at the earliest to the 13th century A.C.[2] It cannot be known when the *maṭha* actually came into the possession of the present holder. It must have been occupied by the latter somewhere between the 13th century and the year 1710 A.C., the date of the present record.

We are enabled in a way to determine the relative antiquity of the two *maṭhas* at Kumbhakōṇam and Tiruvānaikāval. Of the two the former has been the more favoured, being the

[1] See Madras Epigraphist's reports for 1909, p. 104, and 1915, p. 113.

[2] The earliest copper-plate grant of the Conjeeveram *maṭha* is that of Vijayagaṇḍagōpāla, dated 1291 A.C. (Edited in the *Ep. Ind.* by Mr. S. Y. Venkateswara, Vol, XIII, p. 196.)

seat of the Kāmakōṭi *pīṭha* for about two centuries past. The Kāmakōṭi *pīṭha* of Kumbhakōṇam must at the time of our grant have been situated at Kāñchī. The migration of the Śaṁkarāchārya from Conjeeveram to the Kumbhakōṇam *maṭha* must have occurred later than 1710 A.C. The tradition current in the Kumbhakōṇam *maṭha* is to the effect that Rājā Sarabhōji of Tanjore built it for the Chandramauḷīśvara Swāmin, the deity worshipped at the *maṭha*. This is corroborated by a stone inscription in the *maṭha* of the year 1743 Śaka=1821 A.C. Thus from the evidence available it would appear that the Kumbhakōṇam *matha* was in existence only from the 19th century,[1] while that at Tiruvānaikāval must have continued in the possession of the Swāmin at least from between the 13th century and 1710 A.C., as the present epigraph shows.

TEXT.

First Side.

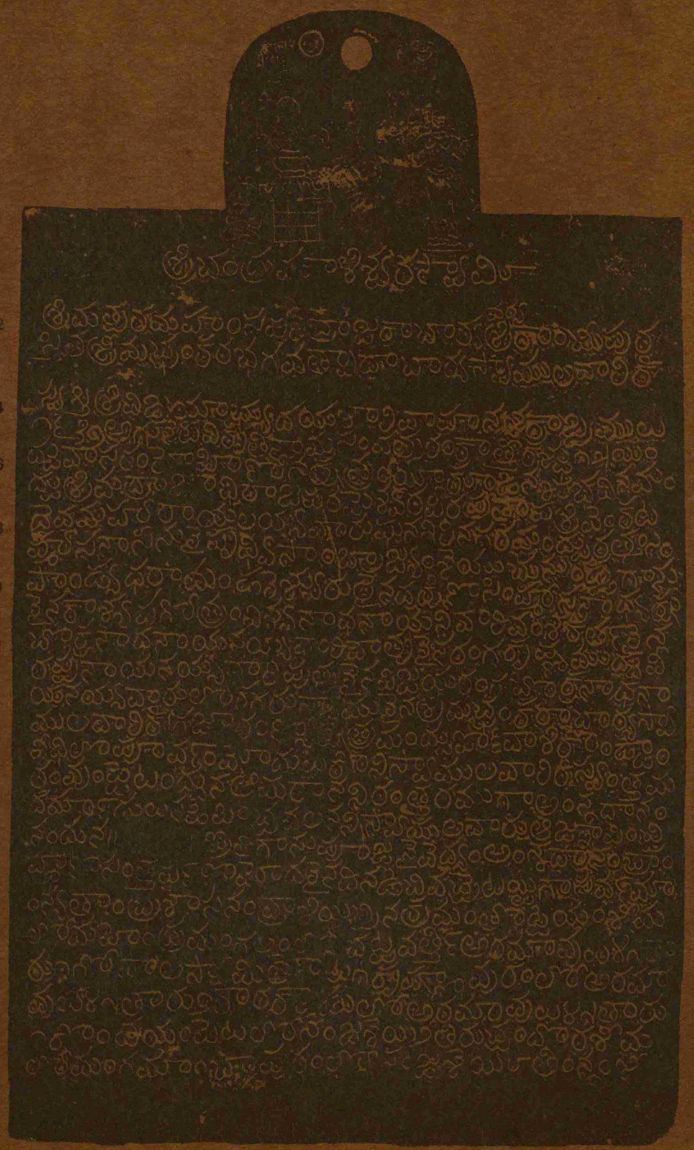
1 श्रीचंद्रमौळीश्वरस्वामि [॥*]
2 श्रीमत्परमहंसपरिव्राजकाचार्यवर्य श्रीकां[ची]पुर-
3 स्थित[2] श्रीमच्छंकरभगवत्पादाचार्य स्वामुलवारिकि [॥]
4 स्वस्ति श्री विजयाभ्युदय शालिवाहनशकाब्दमुलु
5 १६३० अगुनेटि विकृतिनामसंवत्सरं कात्तीक[3] शुध[4] १५ यिं-
6 दुवासरं[5] रोहि[णी]नक्षत्रं यी कूडिन शुभदिनमं-
7 दु[6] [॥*] श्रीमद्राजाधिराज परमेश्वर वीरप्रताप श्रीवेंकट-
8 टेवमहारायलय्यवारु घनगिरिनगरमंदु[6] रत्नसिं-
9 हासनासीनुलै पृथ्विसांब्राज्यं[7] शेयुचुनुंडुगानु[8]
10 पांड्यधरामंडलेश्वरुलैन दक्षिणसिंह्मा[9]सनाध्यक्षु-
11 लैन काश्यपगोत्रं विश्वनाथनायनिवारि वंशकर्तलैन
12 चो[10]क्कनाथनायनय्यवारि पौत्रुलैन[11] रंगकृष्णमुद्दवी-
13 रप्पनायनय्यवारि पुत्रुलैन[12] विजयरंगचो[13]क्कनाथना-
14 यनय्यवारु लोकगुरुस्वामुलैन श्रीमच्छंकराचार्यस्वा-
15 मुलवारिकि । गजारण्यक्षेत्रमंदु[6] पोन्[14]वाग्रिकोड्डा[15]-
16 वीधिलो पूर्वं मी[16]दुलुकोनि स्वामुलवारिकि खंत्तम[17]-
17 ठं वुंडुटंदुन[18] आ मठान निरंत्तर[19]मुगा अन्नदानं

[1] [This is not correct. A.D. 1821 was the date of the building of the new *matha* by king Sarabhōji of Tanjore, the older one, according to tradition, having been erected by his grandfather Pratāpa-simha; see Mr. T. A. Gopinatha Rao's *Copper-plate Inscriptions of the Kāmakoṭi-pīṭha*, Introduction, p. 3.—H. K. S.]

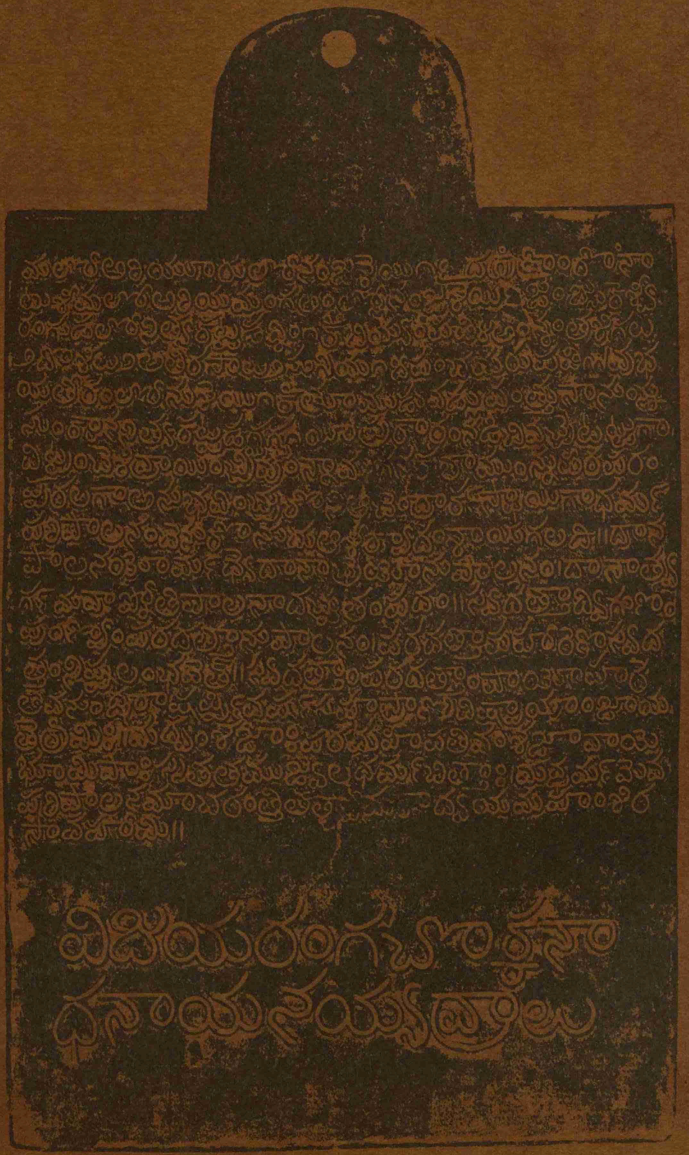
[2] Read स्थित.
[3] Read कार्तीक.
[4] The actual spelling on the plate is *śdha*; read शुद्ध.
[5] Read इन्दुवासरं.
[6] Read °मंदु.
[7] Read °सिंहास . पृथ्वी साम्राज्यं.
[8] Read °नडगानु.
[9] Read सिंह्मा°.
[10] Read as short form of the sign.
[11] Read पौत्रुलैन.
[12] Read पुत्रुलैन.
[13] Read चो°.
[14] Read °कोंडा.
[15] Read °कोंडा.
[16] Read as short.
[17] Read खंतम.
[18] Read °वुंडुटंदुन.
[19] Read निरंतर°.
[20] Read अन्नदानं.

Jambukesvaram Grant of Vijayaranga Chokkanatha Nayaka : Saka 1630.

First Side.



Second Side.



F. W. THOMAS

W. GRIGGS & SONS, LTD. PHOTO-LITH.

18 धर्मादुलु नडिपिंच[1]वलननि खामुलवारु आज्ञापिंचि[2]
19 नंदुन ॥—॥ प्रीतिगानु पूज नैवेद्यं अंन्नदानं[3] ब्रां-[4]
20 ह्मणसंत्तर्पणं मो[5]दलैनदि नडिचिवच्चेटट्टुगा सर्वमां-
21 न्यतांब्रशासनं[6] व्राशियिंचिन क्रमं [॥*] तो[5]ट्टियंशोम-
22 लो महेन्द्रमंगलंलो[7] भट्टवर्ति[8] अरमावु (६४१)?[9] ता-
23 वु १ [।*] गोपालखामि तीट १ [।*] कृष्णपुरंलो अरमा-
24 वु (६४१)? तारु २ [।*] कारक्काडुलो अरमावु (६४१)? तारु
25 १ [।*] कोंडयंपेटलो नंज शेयि २ [।*] तिरुवंदोरु शोम-
26 लो मंगमांबापुरंलो[10] नंज शेयि ८ [।*] तिंत्रं[11]शी-

Second Side.

27 मलो अरियूरुलो नंज शेयि १६ [।*] दक्षिणं कोना-
28 डुशीमलो अरियमंगलंलो[12] नंज शेयि ६ [।*] जेंब्बु[13]केश्व-
29 रंगुडलो[14] नित्य कट्टडोदिनं[15] [१]कि बिय्यं पडि अंन्नं[16] तशोगलु[17]
30 २ दोशलु २ अतिरसालु २ सुगिय १ दोपं चमरु पडि[18] [॥] वुभ-
31 य तीरंलोनु शेयि १कि तूसुडु वलुवंत्तुनानुंलु[19]
32 सुंकान नित्य कट्टडग ग १ [॥] यो प्रकारं नडिचिवच्चेटट्टुगा
33 दिट्टं चेशि व्रायिंचि[20] .यिच्चिवुं चासुग नक तामुंलु पीठ[21]परं-
34 परलगा अनुभविंचुकोनि आचे[22]द्रार्कस्थायिगा धर्म-
35 परिपालनं चे[सु]कोनुचु आशीर्वादं शायगलदि ॥ दान-
36 पालनयोर्मध्ये दानाच्छ्रेयोनुपालनं[23] । दानात्स्व-
37 र्गमवाप्नोति पालनादच्युतं[24] पदं ॥ स्वदत्तादि[25]गुणं
38 पुंण्यं परदत्तानुपालनं । परदत्तापहारेण स्वद-
39 त्तं निष्फलं[26] भवेत् ॥ स्वदत्तां परदत्तां [व]ा यो हरे-
40 [त] वसुंधरा[27] षष्टिवर्षसहस्राणि विष्टायां[28] जाय-

---

[1] Read °च°, [2] Read °चि°, [3] Read अन्न°.
[4] Read ब्रा°. [5] Read the vowel sign as short, [6] Read सर्वमान्यशासना°.
[7] Read °लंली, [8] Read इत्ति,
[9] [The actual reading is अरमावुलु, ४८ *i.e.* 4¼ *aramāvu*. Mr. T. A. Gopinatha Rao in his transcript has made the same mistake. In l. 24 below, the reading "लु ४८" must similarly be substituted for "(६४१)?"—H. K. S.]
[10] Read °रंली, [11] Read तिन्नं°, [12] Read °लंली.
[13] Read ब्रा. [14] Read °गुडिली,
[15] [The actual spelling on the plate is *dnim*.—H. K. S.]
[16] Read अन्नं. [17] Read न्नलु.
[18] [The symbols ८ = ½ and ८| = ¾ are well known. See above, Vol. VIII, p. 130.—H. K. S.]
[19] Read °वंतुनानुंलु. [20] Read °चि. [21] Read तामु.
[22] Read आचंद°. [23] Read °नाच्छे°. [24] Read दच्युतं.
[25] Read °द्विगुणं पुण्यं, [26] Read निष्फल, [27] Read °रांषष्टि°.
[28] Read °ष्ठा°.

41 ते क्रिमिः ॥ *मदंशजाः परमद्दोपतिवंशजा वा ये
42 भूमिपाश्चततमुज्वलधर्मचित्ताः[1] । मद्धर्ममेव
43 परिपालनमाचरंत्ति[2] तत्पादुकाद्वयमहं शिर-
44 सा वहामि ॥
45 विजयरंगचोक्कना-
46 धनायनय्य व्रासु [॥*]

TRANSLATION.

Line 1. The Lord whose crest is adorned by the Moon.

Ll. 2 & 3. To the lord Śaṁkarāchārya, resident in Kāñchīpura, who is a *paramahaṁsa*, and the most exalted of those who have renounced the world.

Ll. 4-6. In the Śaka year 1632 of Śālivāhana, in the year Vikṛiti, on Kārttika, on the full moon day, on Monday, when the star was Rōhinī, on this auspicious day,

Ll. 7 9. When the king of kings, the supreme lord, Vīrapratāpa Vēṅkaṭa-dēva Mahārāya was ruling over the earth, seated on his jewelled throne in Ghanagiri,

Ll. 10-15. The lord of the Pāṇḍya country, who is enthroned as lord of the southern seat, of the Kāśyapa *gōtra*, the descendant of Viśvanātha Nāyaka, the grandson of Chokkanātha Nāyaka and the son of Raṅga-Kṛishna Muttu Vīrappa Nāyaka, Vijayaraṅga Chokkanātha —made to the *lōkaguru* (teacher of the world) Śaṁkarāchāryaswāmi,

Ll 15-19. By command of the Swāmin for giving charity in the shape of food for all time in his own *maṭha*, which has been in existence from antiquity in the Ponvāśikoṇḍān street in Gajāraṇya-kshētra,

Ll. 19-21. For (his) pleasure a perpetual copper-plate grant for worship, offerings, feeding and general propitiation[3] of Brāhmaṇas as follows :—

Ll. 21-28. 4½ half-*māṯ* and 1 *tāru* of *bhaṭṭavṛitti* land in Mahēndramaṅgalam in Toṭṭiyam *śīma*, Gōpāla-swāmin's garden ; 4½ half-*māṯ* and 2 *tārus* in Kṛishṇāpuram ; 4½ half-*māṯ* and 1 *tāru* in Kārakkāḍu ; 2 *śeys* of wet land in Kōṇḍayampēṭṭai ; 8 *śeys* of wet land in Maṅgamāmbāpuram in Tiruchendorai *śīma* ; 16 *śeys* of wet land in Ariyūr in Tinniyam *śīma* ; 6 *śeys* of wet land in Ariyamaṅgalam in the South Kōnāḍu *śīma*,

Ll. 28-31. 1 *śey* of land on both banks (of the Kāvērī)[4] and the right of collection of some tolls for the daily offerings of 4 *paḍis* of rice for 2 *taḷigais* of cooked food, 2 *dōśais*, 2 *atirasams*, 1 *sugiyan* and ¾ *paḍi* of oil for lights, to the god in the Jambukēśvaram temple.

Ll. 32-35. The deed having thus been settled and made for the above purpose, you and your line of disciples on the pontifical throne shall enjoy the lands and protect the charities as long as the sun and the moon run their course (*i.e.* for all time) and grant me your blessings.

Ll. 36-41. Admonitory verses.

Ll. 41-44. My respectful prostrations to those princes of my line as well as others of *ahipativaṁśa* who, being actuated by lofty ideas of charity, preserve my endowment.

Signature of Vijayaraṅga Chokkanāthanāyanayya.

---

[1] Read °मुज्वलं°. [2] Read °रन्ति.

[3] [*Santarpana* seems to be here used in the popular sense of 'sumptuous meal' ; see Kittel, *s.v.*—H. K S.]

[4] [Here again the author and Mr. Gopinatha Rao have not clearly understood the passage, the latter remarking that 'a portion of the passage is somewhat obscure. This was on account of the wrong reading in l. 31. As corrected the passage means : one *ga* (*i.e. varāhan*, above, Vol. VIII, p. 130) from the tolls daily as per arrangement, and (one) *tūm* of paddy from each *śey* on either bank (of the river Kāvērī) for etc. —H. K. S.]

No. 13.—THE INSCRIPTIONS ON THE BIMARAN VASE.

By F. E. Pargiter.

This vase was found by Masson in the village of Bīmarān in the course of his excavations in Afghanistan during the years 1834-7. When excavating "Tope no. 2" he found in its centre a small apartment containing relics. "They consisted of a good-sized globular vase, of alg or steatite, with a carved cover or lid, both of which were encircled with lines of inscriptions scratched with a stylet or other sharp-pointed instrument. The characters were Bactro-Pali. On removing the cover the vase was found to contain a small quantity of fine mould, in which were mingled a number of small burnt pearls, beads of sapphire, crystal, etc. In the centre was standing a casket of pure gold; . . . . ."—that is, apparently, not inside the vase, but in the centre of the small apartment.[1] Bīmarān appears to be in the neighbourhood of Jallalabad. The vase is now in the British Museum.

Two early attempts to decipher the inscriptions were made,[2] and Dowson reconsidered them in 1863.[3] M. Senart published some notes upon them.[4] Dr. Fleet had three photographs taken of the vase and its inscriptions, satisfactory ink-impressions being hardly possible, because the letters are scratched in the stone and the vase has suffered sundry scratches besides, which tend to interfere with the appearance of the letters. The photographs are reproduced in the annexed plate. Fig. III shows the inscription on the cover, and figs. I and II give side views of the vase and together display the whole of the side inscription, which runs a little more than three-quarters round it. I have inspected the vase and compared the photographs carefully with the original inscriptions.

The vase is carved out of brownish-grey stone. Its height is 5·3 inches (15·7 cm.), and its greatest width 5·4 inches (15·9 cm.). It consists of a body and a separate lid or cover. In the underside of its base an oblong mortice has been cut, 1 inch (26 mm.) long, $\frac{3}{4}$ inch (16 mm.) wide and $\frac{1}{5}$ inch (5 mm.) deep, which was evidently meant to receive a tenon to hold the vase. In the mortice are remains of vermilion colour.

The two inscriptions are in Kharoshṭhī characters, which are not well made because the scratching tool seems to have slipped in places and distorted some of them. I call the inscription on the lid (fig. III) inscription A, and that around the vase B. The latter begins at the extreme right of fig. I and is continued into fig. II, where the first two letters are a repetition of the last two in fig. I.

The main feature that requires notice is the sign for subscript *r*, a rightward stroke or curve at the bottom of the main letter. It is applied to *g* in *bhagavata* in A and B, but is not a real *r*. It is also applied to *t*, not only in *putasa* in A and B, but also in *rachhitasa* in A and B, and *bhagavata* in B (though not apparently in A); and in these two words there can be no *tr*. Further, it is applied to *r* itself in *rāchhitasa* in B, where of course it is impossible. It is clear therefore that the stroke or curve has no significance as a letter in these two inscriptions, and is a mere peculiarity or flourish. Hence it means nothing when applied to *t* in *niyatide* in B.

---

[1] *Ariana Antiqua*, pp. 69, 70. The vase and both its inscriptions are figured there on plate II, after p. 54. The gold casket is described pp. 41, 71.

[2] By Edward Thomas in his edition of Prinsep's *Indian Antiquities*, vol. I, pp. 105-8. By General Cunningham in *JASB*, XXIII, p. 707.

[3] *JRAS*, vol. XX, p. 241, with a transcript of both inscriptions in plate III, opposite p. 222.

[4] *Journ. Asiat.*, sér. VIII, vol. XV (1890), p. 133: sér. IX, vol. IV (1894), p. 514.

TEXT.

A.—*On the lid.*

Bhagavata śarirehi Śivarachhitasa **Muṁjanaṁda**-putasa dana-muhe.

B.—*Around the vase.*

Śivarachhitasa **Muṁjavada**-putasa dana-muhe niyátide Bhagavata śarirèhi sarva-Budhana puyae.

TRANSLATION.

A.—*On the lid.*

With rèlics of the Lord; of Śivarachhita, son of **Muṁjanaṁda**, the head of gifts.

B.—*Around the vase.*

The head of gifts of Śivarachhita, son of **Muṁjavada**, is bestowed; with relics of the Lord; for the veneration of all Buddhas.

NOTES.

The father's name is written differently in the two inscriptions. *N* in A seems to be a *v* with the top omitted, and the proper form would seem to be *Muñjavanda*.

Niyatide. The last letter is not well formed, but seems to be *de*. This word plainly agrees with *dana-muhe*, and its termination therefore should also be *e*. *Niyatide* no doubt=*niyatite*, i.e. *niyyātitē*, "bestowed." *Niyyātita*=Sanskrit *niryātita*,[1] which occurs in the *Divyāvadāna* and appears in Pali in the verb *niyyādēti*.

Dana-muhe. This is clearly a nominative, and the question that arises is, what does *muhe* represent and mean? I have had the great benefit of discussing this expression with Dr. F. W. Thomas and Professor Macdonell, and offer the following explanations of it.

As regards its form, *h* in Prakrit is often a degenerate *kh*; *kh* may represent either an original Sanskrit *kh* or a weakened Prakrit *kkh*; and Prakrit *kkh* may represent Sanskrit *ksh* and Sanskrit *khy*. Pischel gives instances of the full change from *ksh* to *h* in his Prakrit Grammar, § 323, but none, so far as I have seen, of that from *khy* to *h*. The want may be due to the fact that the latter process is much rarer than the former; still analogy would indicate that there would be no difficulty in the modifications *khy* > *kkh* > *kh* > *h*; and Dr. Thomas agrees in this view. Hence *muha* might represent *mukha*[2] or *mukhya*, and *dana-muha* would = *dāna-mukha* or *dāna-mukhya*.

Dana-muhe is obviously a substantive and not an adjective, and so must be a tatpurusha compound and not a bahuvrīhi. Hence the question for decision is, what is the meaning of *dāna-mukha* and *dāna-mukhya* as tatpurushas, that is, what meanings have *mukha* and *mukhya* as the final members of a tatpurusha.

M. Senart discussed *dāna-mukha* with reference to the inscriptions in which it occurs and, while rendering it "moyen, objet d'aumône," doubted whether it had any difference in

[1] So M. Senart took it, *Journ. Asiat.*, sér. VIII, vol. XV (1890), p. 133.

[2] So M. Senart has taken it, *Journ. Asiat.*, sér. VIII, vol. XV (1890), p. 133.

The Inscriptions on the Bimaran Vase.

B

B

F. W. THOMAS

SCALE THREE-QUARTERS

WHITTINGHAM & GRIGGS, COLL.

A

SCALE FIVE-SIXTHS

meaning from simple *dāna*. Dr. Thomas also discussed the word (*J. R. A. S.*, 1915, pp. 97 sqq.) in connexion with some instances of the words *mukha* and *mukhya* at the end of compounds in the *Kauṭilīya-Arthaśāstra*, where *mukha* means "head, heading, sum" in administrative arrangements and accounts, and came to the conclusion—"Hence it seems best to accept it [*dāna-mukha*] as a mere synonym for *dāna*, a misapplication of a technical term, 'gift department,' 'gift heading,' 'gift account,' under which the donation would be recorded in the accounts of the institution benefited. Or is it, after all, the inscription itself?"

It is well however to consider also more popular illustrations of the use of *mukha* and *mukhya* final; and here the language of the Purāṇas, which corresponds better than other Sanskrit compositions to that of Prakrit inscriptions, throws fresh light; for both words occur abundantly there as the last member of a compound.

I will deal with *mukhya* first, citing instances out of the many that occur.

(1) "Chief, foremost," and so implying the meaning of *ādi*: thus—*Sūry-ēndu-Marīci-mukhyāḥ*, "of whom the sun, the moon and Marīci were chief," "the sun, the moon, Marīci and others" (*Matsya-P.*, *245*, 20): *Vṛiddha-Kauśika-mukhyaiḥ*, "with Vṛiddha-Kauśika and others" (*Brahma-P.*, *170*, 88).

(2) "Chief, pre-eminent (in)": thus—*vaṁśa-mukhyāḥ*, "pre-eminent men in the family" (*Matsya-P.*, *201*, 40): *dvijēbhyo Vēda-mukhyēbhyaḥ*, "to brahmans pre-eminent in (knowledge of) the Vēda" (*Brahma-P.*, *218*, 18[1]).

(3) "Chief (of or among)": thus—*Brahmaṇā dēva-mukhyēna*, "by Brahmā chief of the gods" (*Matsya-P.*, *104*, 1).

(4) Then virtually an adjective qualifying the preceding noun, "chief, foremost, pre-eminent": thus—*ṛishi-mukhya*, "foremost among rishis," and so "a pre-eminent rishi" (*Brahma-P.*, *73*, 23, 25; *127*, 6): *vipra-mukhya*, "a pre-eminent brahman" (*Brahma-P.*, *220*, 126; *Padma-P.*, vi, *268*, 77, 80): *tīrtha-mukhya*, "a very distinguished tīrtha" (*Brahma-P.*, *132*, 9). This use is very common.

(5) And so virtually coming to mean "choice, superfine," as qualifying the noun to which it is added: thus—*turaga-mukhya*, "a very fine horse" (*Padma-P.*, iv, *112*, *Purātana Rāmāyaṇa*, 6): *ratha-mukhya*, "a specially fine chariot" (*Vāyu-P.*, *90*, 14; *93*, 19: *Brahma-P.*, *216*, 55): *śara-mukhya*, "a choice arrow" (*Padma-P.*, vi, *269*, 166). Accordingly *dāna-mukhya* would mean "a choice gift."

As regards *mukha*, it is used similarly to *mukhya* in the first sense, "the chief, the foremost"; thus—*sarva-dēvatāḥ*, | *Mad-Bhava-mukhāḥ*, "all the gods having me (Brahmā) and Śiva as their chiefs" (*Padma-P.*, vi, *203*, 37): *Rākshasāḥ Kumbhakarṇa-mukhāḥ*, "the Rākshasas, of whom Kumbhakarṇa was the chief" (*Padma-P.*, iv, *112*, 204). So it virtually implies the meaning of *ādi*; thus—*dēva-daitya-mukhān sarvān*, "gods, Daityas and all others" (*Liṅga-P.*, i, *58*, 1): *Vishṇu-mukhair dēvaiḥ*, "by Vishṇu and the other gods," all except Brahmā (*Padma-P.*, v, *40*, 31): *Puruhūta-mukhāḥ.....vijitāḥ*, "Indra and the other gods were conquered" (*ibid*, 32).

Of the other meanings I have found no definite instances; yet possibly *Vārāhas tu śruti-mukhaḥ prādurbhāvo*[2] might be taken to yield the second meaning; and *Tad=ātri-putro 'tri-mukhaiḥ samēto*[3] might give the fourth meaning.

[1] Equivalent to *dvija Vēda-vṛiddha* in verse 23. But it might also mean "to Brahmans who hold the Vēda as supreme," equivalent to *vipra Vēda-puraskṛita* in verse 16.

[2] *Brahma-P.*, *213*, 32; *Padma-P.*, v, *16*, 53: cf. *Hariv.*, *42*, 2226. *Śruti* in the Purāṇas often means "ordinary tradition."

[3] *Brahma-P.*, *140*, 17.

Dana-muhe then, if it represents *dāna-mukhya*, would certainly mean "a choice gift." If it represents *dāna-mukha*, that meaning cannot definitely be given to it. I cannot but think that *dāna-mukha* denotes something more particular than simple *dāna*. It can be a tatpurusha compound; for *mukha* occurs as the final member of such compounds, as in the word *āya-mukha*, that Dr. Thomas cites from the *Kautilīya-Arthaśāstra*, and also in the words *divasa-mukha*, *ritu-mukha*, and *yajña-mukha*. Since *mukha* means "beginning, commencement," in these three expressions, and has also the meaning "the chief, principal, best," as well as "head, heading," *dāna-mukha* can literally mean "the commencement of gifts" (implying perhaps that it was the first gift made), or "the chief or best of gifts"[1] (implying perhaps that it was the best gift made), or again what Dr. Thomas has suggested, as already noticed. At present its exact sense is uncertain, and it may be best to render it provisionally by some general expression that combines the above meanings without attempting precision, and so I have translated it as "the head of gifts."

No. 14.—THE FIRST ARYA-SIDDHANTA

The "Aryabhatiya," or "Laghu-Arya-Siddhanta" of Aryabhata, A.D. 499.

Working Tables for calculation by the true, or apparent, motions of Sun and Moon.

By Robert Sewell (I.C.S., Retired).

("*Indian Chronography*," *continued from Vol. XV above, p. 245.*)

286. My last article (*Epig. Ind., Vol. XV, pp. 159-245*) provided working Tables for verifying dates according to the requirements of the *Siddhānta-śirōmaṇi*; the present one provides similar Tables for the *First Ārya-Siddhānta*. These Tables are framed so as to correspond to those published in the *Indian Calendar*, which, for luni-solar computation, generally followed the *Sūrya-Siddhānta*.

Since amongst the ancient historical records yet discovered in India by far the larger number comes from Southern India, where the *Ārya-Siddhānta* has retained its place in popular favour throughout the centuries, it is plainly necessary to provide Epigraphists with information which will allow them to test with scientific accuracy, and according to the requirements of that authority alone, the details of documentary dates. It is probable, as I have already more than once insisted, that a number of records whose dates might have been found correct had they been computed by the *Ārya-Siddhānta* have been set aside as irregular or of doubtful accuracy because their examination was conducted solely by *Sūrya-Siddhānta* Tables.

No pains have been spared to render the information that follows scientifically correct. But we do not yet know how far, or in what tracts or in what periods, the by-gone framers of local almanacs adhered strictly to rule; or used other sets of Tables for their guidance; or worked by whole numbers alone, discarding fractions; or made their calculations in true or apparent time instead of, as in these Tables, in mean or clock time. We have, moreover, as yet no definite information as to at how late a date calculations were made by the sun's and moon's mean movements as opposed to their true or apparent movements; nor do we know with any certainty the boundaries of the tracts within which the different rules governing the civil beginnings of solar

[1] This seems to me the most probable meaning.

months were adhered to (*Ind. Calendar*, § *28*). These remarks apply, of course, to all Tables or ephemeres yet, or to be, published, which can only confine themselves to the actual requirements of the Siddhānta concerned. Such matters are problems of the future, only to be solved after protracted enquiry and investigation. Dewan Bahadur L. D. Swamikannu Pillai gives it as his opinion (*Indian Chronology, p. 70, § 169*) that, while the *Ārya-Siddhānta* was used for solar computation, the authors of South-Indian pañchāngs in some cases carried out their lunar calculations, for the tithi, nakshatra, etc., by *Sūrya-Siddhānta* rule. This remains to be proved.

287. It is easy to understand how dates of documents, the details of which dates depend on the position of sun and moon, must often differ when calculated by different authorities. Taking only the *Ārya* and *Sūrya Siddhāntas* into consideration, it will be seen by Table A below that in 114 years out of the 850 with which the main Table LXI is concerned there were radical differences. In 66 of these years the saṁvatsara cycle-name of the whole year was different; in 33 years the intercalation and suppression of lunar months were different; and the day on which the luni-solar year began was different in 15 years.

Consider the year A.D. 1418-19, for instance, or Śaka 1340 expired. This year was, according to the northern system of nomenclature, called "Viśvāvasu" by the followers of the *Ārya*, but "Krōdhin" by those of the *Sūrya-Siddhānta* In the same year there was, by the *Ārya-Siddhānta*, a suppression of the lunar month Māgha and an intercalation of Phālguna, while by the *Sūrya-Siddhānta* there was none such; so that a date correctly expressed in *Ārya-Siddhānta* reckoning in that year would seem entirely inaccurate when tested by *Sūrya-Siddhānta* Tables.

Arrangements of the Tables.

288. The principal working-Tables for computation of dates expressed in *First Ārya-Siddhānta* reckoning are Tables LXI to LXXI below. Tables LXI to LXX are disposed so as to correspond in rotation with Tables I to X of the "*Indian Calendar*," and have been framed in similar manner. This arrangement is adopted for the convenience of those who, during the last twenty years, have become accustomed to the processes of that publication.

Table LXI corresponds to Table I, "*Indian Calendar*."[1]
„ LXII „ „ „ II, Part II, "*Indian Calendar*."
„ LXIII A „ „ „ III, Part I, „ „
„ LXIII B „ „ „ „ Part II, „ „

[This Table is framed in a similar manner to Table XVIII A, "*Indian Chronography*," which it is intended to supersede.]

Table LXIV corresponds to Table IV, "*Indian Calendar*."
„ LXV „ „ „ V, „ „
„ LXVI „ „ „ VI, „ „
„ LXVII „ „ „ VII, „ „

[Tables LXVI A, LXVII A give closer details than do Tables LXVI, LXVII, and are to be used for very accurate calculation in doubtful cases.]

Table LXVIII corresponds to Table VIII, "*Indian Calendar*"
„ LXIX „ „ „ IX, „ „
„ LXX „ „ „ X, „ „

[1] Because of this intentional correspondence the years of Indian eras quoted in cols. 1 to 4 are concurrent years, as in the "*Indian Calendar*."

Table LXXI is taken from Tables XLI A and B, "*Indian Chronography*" (*pp. 176, 177*). It enables the week-day corresponding to the Hindu date under examination to be determined according to European computation.

Then follow three Tables by which the details given in the main Table LXI have been calculated. These are Table LXXII, which fixes the values of *a*, *b*, *c* (mean distance of moon from sun, moon's mean anom., sun's mean anom.) at the beginning of the centuries concerned; Table LXXIII, which gives the same information for the beginnings of odd years of centuries; and Table LXXIV, which provides, in combination with Tables LXXII and LXXIII, an easy method of arriving at the values of *a*, *b*, *c*, or the mean positions of sun and moon at mean sunrise on the first civil day of each luni-solar year. The system of work is the same as that of Prof. Jacobi.

Full particulars of the moon's equation of the centre will be found in the last Table LXXV.

ELEMENTS OF THE FIRST ARYA-SIDDHANTA.

289. This work was composed by Āryabhaṭa at Kusumapura in A.D. 499, or the year 3600 (expired) of the Kaliyuga. About A.D. 638 a treatise called the *Dhī-vṛiddhi-da* was written by Lalla, who introduced a bīja, or correction, affecting three of the principal elements of the Siddhānta. He seems to have reduced by about 10′ in a century the moon's increase in her mean distance from mean sun (our "*a*"); and he added about 36′ in a century to the moon's mean anomaly (our "*b*"); his third correction had reference to the planet Jupiter, with which at present we are not concerned. He did not make any change in the sun's mean anomaly (our "*c*"). The *Karaṇa-prakāśa*, of date A.D. 1092, an authority largely used in Southern India, is based on Āryabhaṭa's *Siddhānta* as amended by Lalla.

The Tables given below, which deal with the period A.D. 899-900 (K.Y. 4000 expired) to A.D. 1750-51 (K.Y. 4851 expired) include Lalla's corrections.

290. (i) The length of the sidereal solar year, according to the *Ārya-Siddhānta*, is 365·2586805 days, or $365^{d}\ 6^{h}\ 12^{m}\ 30^{s}$.

(ii) Sines of angles are the same as those of the *Sūrya-Siddhānta*, based on a radius of (sin. 90°=) 3438′. The 24 base sines and equations of the sun's centre are given in my Table XLVII, Vol. XIV above. Those of the moon's centre in Table LXXV below.

(iii) For the sun's mean motion per day, hour, minute and second, see Table XLIV, Vol. XIV.

(iv) The circumference of the sun's epicycle is 13° 30′; that of the moon 31° 30′. There is no contraction of the epicycle in either case. (Jacobi, *Vol. I above, p. 441.*)

(v) There is no shift of the sun's apsis. The longitude of his perigee-point is always 258°; apogee 78°. In ten-thousandths of the circle the perigee is 7166·6.

(vi) The sun's equation of the centre at the moment of true Mēsha-saṁkrānti in every year, i.e. the moment when the true sun reaches celestial longitude 0°, is, according to Dr. Schram's calculation, 2° 6′ 57″·323494885, or, in ten-thousandths of circle, 58·7756441701; the sun's mean longitude at the same moment being 357° 53′ 2″·676505115, or, in ten-thousandths of circle, 9941·224355830; and his mean anomaly 99° 53′ 2″·676505115, or, in ten-thousandths of circle, 2774·557689163.

[1] M. de Ries has worked this out quite independently, and his calculation agrees with that of Dr. Schram as far as the 6th decimal.

(vii) For the sun's mean and true long. for every consecutive 24-hour period measured from the same moment (true Mēsha-saṁkrānti) readers are referred to Table XLVIII A (*Vol. XIV above*).

(viii) The sun's equation of the centre (*see above, Vol. XIV, Table XLVII*) is obtained by the formula $\frac{3}{80}$ sin. a. For sin. eqn. $= \frac{\text{minutes in epicycle}}{\text{minutes in orbit}} \times$ sin. a,[1] where a is the sun's mean anom.; and here the minutes in the epicycle are 810′, the circumference being 13° 30′, and those of the orbit are 21600′ (360°). Hence sin. eqn. $= \frac{810}{21600}$ sin. a, or $\frac{3}{80}$ sin. a. In all equations of the sun's centre, the angle being less than 3° 45′, the eqn. is the same as the sin. eqn. (*below*, § *294 ii*).

(ix) The moon's equation of the centre (*below, Table LXXV*) is obtained by a similar proportion. The circumference of the epicycle being 31° 30′ or 1890′, the working formula is sin. eqn. $= \frac{1890'}{21600'}$ sin. a, or $\frac{7}{80}$ sin. a; but in this case, the sin. eqn. for all angles in the quadrant lying between 3° 45′ and 7° 30′, the equation does not equal the sin. eqn. The process for obtaining the former from the latter is fully set forth in § 294 below.

(x) The śōdhya, or time-equivalent of the equation of the centre—in other words the interval of time between the moments of the true sun reaching long. 0° (true Mēsha-saṁkrānti) and mean sun reaching the same point (mean Mēsha-saṁkrānti)—is calculated by Dr. Schram as 2·146831 days, or $2^d\ 3^h\ 31^m\ 26^s{\cdot}1984$. This differs a little from the accepted Hindu valuation $2^d\ 3^h\ 32^m\ 30^s$. As the latter is believed to have been always taken in India as the śōdhya value according to the *First Ārya-Siddhānta*, it is the value adopted in the present work.

(xi) According to this *Siddhānta* the Kaliyuga era began, or in other words K.Y. 0 expired or K.Y. 1 current began, with a conjunction at celestial longitude 0° of mean moon, mean sun, and the principal planets at the moment of mean sunrise at Laṅka on Friday, 18 February, B.C. 3102. That was the moment of mean Mēsha-saṁkrānti in that year. It was $0^h\ 0^m$ Laṅka time on that morning.

(xii) At that moment, and the same in every succeeding year, the sun's apsis (perigee being at long. 258°, his mean anom. (our "c") is (360°—258°) 102°, or, in thousandths of circle (our notation), 283·3̇.

(xiii) The moon's mean anom. (our "b") was 90°, or, in thousandths of circle, 250.

(xiv) Since mean moon and mean sun were at that moment in conjunction, the distance between them was *nil*. This is represented in ten-thousandths of circle by the completed circle 10,000. From this, in order to arrive at the exact value of our "a," must be deducted the sum of the greatest equations of ☾ and ☉. These are deducted for convenience of calculation, the respective quantities being added to "eqn. b" and "eqn. c," so that the working values may always be additive. The sum of these greatest equations I estimate at 199·115048361, in ten-thousandths of circle (*below*, § *296*) 10,000 less this quantity = 9800·884951639. Hence at the beginning of the Kaliyuga—

$a = 9800{\cdot}884951639$

$b = 250$

$c = 283{\cdot}3\dot{}$

[1] Above, §§ 251, 252, Vol. XIV, pp. 9-10; Jacobi (above), Vol. I, p. 441.

CONSTRUCTION OF THE TABLES.

291. No special remarks are necessary except with reference to Tables LXIII B. (lengths of solar months), LXVI A and LXVII A (Detailed "Equation *b*" and "Equation *c*"), LXVIII (Indices of tithis, etc.), and the three Tables LXXII, LXXIII, LXXIV. The remainder are only duplicates of the similar Tables in the "*Indian Calendar.*" (*See "Arrangement of Tables," above, § 288.*)

Table LXIII B.—Lengths of the true solar months.

292. M. Louis de Ries has been repeatedly quoted in these pages as a most careful calculator. Several years ago he kindly worked out for me an estimate of the lengths of the true solar months according to the *First Āryaṣ-Siddhānta*, but did not inform me of the process by which he obtained his results. An entirely independent calculation has now been carried out, based on my own Table of the sun's true longitude for each 24-hour period of the solar year (*above, Vol. XIV, Table XLVIII A*)—a Table, let it be understood, prepared some years subsequent to M. de Ries' communication and to which he has never had access.[1] Comparison of results proves the accuracy of M. de Ries' figures, and these have been adopted without alteration in my Table. The complete agreement of our respective fixtures is really remarkable.

For example, M. de Ries found that the true sun, according to Āryabhaṭa as corrected by Lalla, reaches 180° of celestial long., the moment of the Tulā-saṁkrānti, $186^d\ 21^h\ 21^m\ 37^s{\cdot}82$ after the moment of true Mēsha-saṁkrānti, the astronomical beginning of the true solar year.

My own work for solution of this problem is as follows:—It will be seen from Table XLVIII A (*above, Vol. XIV*) that on that 186th day, i.e. after 186 periods of 24 hours each from the moment of true Mēsha-saṁkrānti, the true sun has to travel (180°—179° 6′ 55″·21=) 53′ 4″·79 before reaching the Tulā-saṁkrānti point, 180°. Calculating by his actual velocity on day 186 (*Table XLIX, Vol. XIV*), the time required for him to accomplish this journey (using his true, not mean, velocity in minutes and seconds as well as in hours[2]) is found to be $21^h\ 21^m\ 37^s{\cdot}82$,—precisely M. de Ries' fixture. All the details given by M. de Ries have been similarly examined, and found correct.

Dewan Bahadur L. D. Swamikannu Pillai's estimate of the lengths of these months (*Indian Chronology, Table II*) differs somewhat from ours, the sun according to him arriving at each saṁkrānti always a little later than it does by our determination. The greatest difference between us is at the Tulā-saṁkrānti, which his Table shews to occur $3^m\ 34^s{\cdot}18$ later than the time yielded by our Table. Adding together the lengths of the twelve solar months as given by him, the length of the *Ārya-Siddhānta* year appears to be $365^d\ 6^h\ 12^m\ 37^s$, or 7 seconds longer than its accepted length.

Tables LXVI A, LXVII A.—"Equation b" and "Equation c."

293. In order to obtain the correct working equations of ☾ and ☉ from their respective mean anomalies it is only necessary in ordinary cases to use Tables LXVI, LXVII, which give the values of "eqn. *b*" and "eqn. *c*" roughly in whole numbers. For very close calculation, however, Tables LXVI A and LXVII A are provided, which give the exact

[1] It was published during the war.

[2] That is to say, dividing up the velocity per hour (Table XLIX) on that day into minutes and seconds, and not using Table L—which only states the sun's *mean* velocity.

equations with four decimal places for a large number of anomaly angles. For an explanation as to the construction of these Tables see my paper on the *Siddhānta-śiromaṇi* (*above, Vol. XV, § 275*).

294. It is advisable to explain clearly my reason for differing from Prof. Jacobi as to the amount of the greatest equation of the moon, which he values, in ten-thousandths of the circle, at 139·0 as against my 139·4.

"*Eqn. b.*" The general formula (§ 290, ix) for the equation of the moon's centre is, a being the angle of mean anom., sin. eqn. $= \frac{7}{80}$ sin. a. To obtain the equation from the sine of the equation-angle the proportion eqn. : sin. eqn. :: diff. in angle : diff. in sine is used. The Hindu astronomers always worked by sections of anomaly-arc, each measuring 3° 45′, or 225′. Reference to the Equation-Table LXXV will shew that in the case of the first group anom. 0° to 3° 45′ the diff. in anom. is 225′ and the diff. in sine is also 225′. Hence, in the case of all anom. angles between 0° and 3° 45′ eqn. = sin. eqn. But in the case of all anom. angles between 3° 45′ and 7° 30′—and no equation angle of the moon's anom. exceeds the latter quantity—the diff. in angle is 225′ and the diff. in sine is 224′; so that the formula to be used for all angles coming into this second group is eqn. $= \frac{225'}{224'}$ sin. eqn. This applies only to the excess in the angle over 3° 45′. The working rule, therefore, for finding the equation of angles lying between 3° 45′ and 7° 30′ is as follows:—

With the formula $\frac{7}{80}$ sin. a, find the sin. eqn. From the sin. eqn. deduct 225′. Multiply the remainder by 225′ and divide the product by 224′. Add 225′ to the result.

Or, a little more simply,—From the sin. eqn. deduct 225′. Divide the remainder by 224′ Add the result + 225′ to the sin. eqn.

For an example let us suppose that it is required to find the moon's eqn. for anom. 67° 30′. Sin. 67° 30′ = (*Table LXXV*) 3177′. $\frac{7 \times 3177'}{80} = 277'{\cdot}9875$, or 4° 37′ 59″·25, an angle between 3° 45′ and 7° 30′. 277′·9875 − 225′ = 52′·9875, and this divided by 224′ = 0′·236551. 52′·9875 + 0′·236551 + 225′ = 278′·224051, or 4° 38′ 13″·44306. This is the correct equation *b* for the given anom. It is stated by Prof. Jacobi (*above, Vol. I, Table XXIV A*) shortly as 4° 38′ 13″.

Turning now to the equation of 90°, the greatest equation ☾, and working in the same way, sin. 90° = 3438′. $\frac{7 \times 3438'}{80} = 300'{\cdot}825$. This less 225′ = 75′·825, and this divided by 224′ = 0′·338504464. 75′·825 + 0′·338504464 + 225′ = 301′·163504464, or 5° 1′ 9″·810268, which is the exact equation required. In ten-thousandths of circle this = 139·427548361.

295. "*Eqn. c.*" [Working similarly for the greatest equation ☉ or the equation of sun's anom. 90°.] The formula for finding sin. eqn. in this case is (§ *290, viii*) $\frac{3}{80}$ sin. a. Sin. 90 = 3438′. Sin. eqn. $= \frac{3 \times 3438'}{80} = 128'{\cdot}925$, or 2° 8′ 55″·5, or, in ten-thousandths of circle, 59·6875; and, because this angle is one in the first group, being less than 3° 45′, the eqn. = sin. eqn. Hence

☉'s eqn. 90° = 59·6875. This is the same as Prof. Jacobi's valuation, which he gives in degrees as 2° 8′ 56″ and in circle measurement (my notation) as 59·7.

296. *Greatest equations* ☾ *and* ☉. My estimate, therefore, of the sum of the greatest equations ☾ and ☉ is—

☾	.	139·427548361
☉	.	59·687500000
TOTAL	.	199·115048361

The difference between us causes a slight difference in our respective Tables of equation.[1]

Table LXVIII.—Indices of tithis, etc.

296-A. In this Table the indices are given with decimal points for guidance in close cases. Otherwise they correspond exactly to those in Table VIII, "*Indian Calendar.*" The indices of yogas (col. 6) are the same as those of nakshatras (col. 8).

Tables LXXII, LXXIII, LXIV.

297. Prof. Jacobi (*above, Vol. I, p. 450*) has provided a Table, XIII, shewing for four of the Indian astronomical authorities the places of the sun and moon at the beginning of centuries,[2] and another, XV, shewing their increases through the years of a century according to the *Arya-Siddhānta* with Lalla's corrections. It is plain from Table XIII that in Prof. Jacobi's opinion Lalla did not interfere with Āryabhaṭa's fixtures previous to the year K.Y. 3600, the date of the latter's work, but introduced his corrections for all later years.

If, therefore, we establish by Āryabhaṭa alone the values of *a*, *b*, *c* for 36 centuries of the Kaliyuga and add to these their values at the beginning of that era as given above, we shall arrive at their values (positions of sun and moon) at the beginning of K.Y. 3600—values, that is, recognized by Lalla: and Tables giving Lalla's estimate of the periodic changes in position of the sun and moon for centuries, years, and days will enable us to ascertain their position at any later date when computed by the *Arya-Siddhānta* with the bija.

298. (i) First to find the century increase of *a*, *b*, *c* respectively according to Āryabhaṭa uncorrected. We work for mean sunrise values only, not for values at moments of Mēsha-saṅkrānti. We require, that is, the several increases in a common century of 36526 civil days and in a defective century of 36525 such days. In the 36 Kaliyuga centuries concerned there were 31 of the former and 5 of the latter.

(ii) As regards the time-interval between the moments of mean Mēsha-saṅkrānti and the nearest mean sunrises at the beginning of each century, Prof. Jacobi's column headed "Cor." in Table XIII states these clearly in ghaṭikās and palas. Mean Mēsha-saṅkrānti always occurs 2^{d} 3^{h} 32^{m} 30^{s} after true Mēsha-saṅkrānti, and the moment of the latter's occurrence every year is given in hours and minutes in col. 17, Table I, "*Indian Calendar.*" There is no difference between us in this respect.

[1] For the information of those who wish to compare the two it is desirable to point out that in Prof. Jacobi's Table VII (*Vol. XI, above*), under head "Equation" on left side, the tenth entry from the top, "626" is probably a misprint for "616"; and in the same column, the eighth entry from the bottom, "152" should preferably be read "142."

[2] There appears to be one misprint in Jacobi's Table XIII. Under head "Dist. (— ☉ uncorrected," in the section dealing with the *Arya-Siddhānta*, against K.Y. century 4300, the number of minutes should be "14," not "24."

(iii) The advances in the values of a, b, c respectively during a *common century of 36526 civil days* according to Āryabhata uncorrected, excluding whole revolutions, are—a (mean moon's distance from mean sun) 319° 24′ 30″·645, b (☾'s mean anom.) 211° 1′ 55″·775, c (☉'s mean anom.) 0° 7′ 48″·139. These in circle measurement (our notation) are—

$$a = 8872{\cdot}458680555$$
$$b = 586{\cdot}100443673$$
$$c = 0{\cdot}361215708$$

(iv) Taking only the circle measurement, the respective increases for *one day of 24-hours* are—

$$a = 338{\cdot}632000730$$
$$b = 36{\cdot}291575876$$
$$c = 2{\cdot}737785720$$

(v) Deducting one day's increase from the former fixtures, we have for a *defective century of 36525 civil days*—

$$a = 8533{\cdot}826679825$$
$$b = 549{\cdot}808867797$$
$$c = 997{\cdot}623429986$$

We now have to work out the correct details for the first 36 centuries of the Kaliyuga, 31 common and 5 defective.

299. (i) a. Using the above figures, it is found that the advance of a in that period (omitting quantities of 10,000 or whole revolutions[1]) was 7715·352496330; and since at the epoch of the Kaliyuga the distance between mean moon and mean sun was *nil* (*above*, § *290*, *xii*), the same represents their relation at the beginning of K.Y. 3600. But for tabulation purposes we have to deduct from this the sum of the greatest equations ☾ and ☉ (§ *290*, *xiv*; *and 295*). This sum, as already stated, I estimate at 199·115048361. Therefore the tabular a for the beginning of K.Y. 3600 is 7516·237447969. Prof. Jacobi gives this figure, as I interpret him,[2] in our notation as 7516·6. The difference between us is due to his estimation of the greatest equations ☾ and ☉ as 198·7 (*margin of Table quoted in footnote below*) instead of 199·1. But I adhere to my figure, the reason for which has been fully explained.

(ii) b. The advance of b in the first 36 centuries, omitting whole revolutions,[3] was in thousandths of the circle, 918·158092848. Adding to this the value of b at K.Y. 0 (§ *290*, *xiii*), namely 250, we have for the moon's mean anom. at the beginning of K.Y. 3600, b=168·158092848.

(iii) Now in this matter Prof. Jacobi and myself are not quite in accord. He states the value (*Vol. XI above, Table V B*) as in his notation 6718. This in my notation, measuring from perigee instead of apogee, is 171·8. This figure corresponds to his valuation of b at that moment, in degrees, etc., as given in Vol. I above, Special Table XIII, where it is fixed, for the moment of mean Mēsha-saṁkrānti, as 245° 6′ 0″. The correction for mean sunrise value is the moon's change in 15 ghaṭikās, or 3° 15′ 58″·5; making the position of ☾ at mean sunrise

[1] There are 1236 synodical revolutions of the moon in a century.

[2] In both sections of his Table V (*Vol. XI above, A and B*) Prof. Jacobi's entry "76166" is manifestly a misprint for "75166." In the same Table, Section A, opposite "cent. 41" the entry "19789" should be "18789."

[3] There are 1335 anomalistic revolutions of the moon in a century.

241° 50′ 1″·5, which, in thousandths of circle, is 171·760416667. Not being absolutely certain in this case that my valuation is more accurate than his, I defer to him, and accept his figure as correct.

(iv) *In any very close case arising from the use of the Tables which follow the difference between us in the value of b, namely 3·6, may be deducted from the resulting b, and the date tested by my own estimate.*

(v) *c*. The change in the sun's mean anom. (our *c*), similarly calculated for the 36 centuries,[1] was 999·314836816. Adding 283·3, the value of *c* at K.Y. 0 (§ *290, xii*), we have for K.Y. 3600 *c*=282·648170149. But here again there is a minute difference between my estimate and that of Prof. Jacobi. He gives, for the sun's mean anom. (measured from apogee) at the beginning of K.Y. 3600 (mean Mēsha-saṁkrānti), 282°—a value certainly correct. To obtain mean sunrise value 14′ 47″ has to be deducted,[2] with the result 281° 45′ 13″, which in thousandths of circle=782·648919753, and in my notation (measurement from perigee) =282·648919753. I let this stand.

(vi) The values, then, adopted in this work for the positions of ☉ and ☾ at *mean sunrise at the beginning of K.Y. 3600 are*—

$$a = 7516{\cdot}237447969$$
$$b = 171{\cdot}760416667$$
$$c = 282{\cdot}648919753$$

300. (i) Table LXI below, however, the main working Table, starts from the year K.Y. 4000, and we have to add to the above figures the respective increases of *a, b, c* for four centuries, these increases being assessed by Lalla's values and not by the original values of Āryabhaṭa (§ *289*).

(ii) The increases of *a, b, c* in one day, one year and one century according to Lalla are given in the heading of Table LXIV below. The four centuries are all common ones, and, adding the necessary quantities, we have *for the beginning of K.Y. 4000,—mean sunrise value*—

$$a = 2987{\cdot}553682533$$
$$b = 523{\cdot}155092591$$
$$c = 284{\cdot}093782577[3]$$

These agree, *mutatis mutandis*, with Prof. Jacobi's figures (*Vol. XI, Table V*), which, in my notation, are *a*=2988·0, *b*=523·2, *c*=284·1.

(iii) Now these values are, as will be seen from the entry "1" in Jacobi's column for the week-day (*w*.), the figures for mean sunrise on Sunday, that is to say, on Sunday, 25 March,

[1] Omitting his 100 whole sidereal revolutions.

[2] 14′ 47″, or actually 14′ 47″·04, is the ☉'s mean motion in 6 hours, the difference in time between mean sunrise and the moment of mean Mēsha-saṁkrānti on the day when, astronomically, K.Y. 3600 began.

[3] We may estimate the value of *c* on the Sunday at the beginning of K.Y. 4000 in another way. The sun's mean anom. at the moment of mean Mēsha-saṁkrānti is always 283·3, or 102° (§ *290, xii*). In the year in question, A.D. 899, true Mēsha-saṁkrānti took place (*Indian Calendar, Table I*) at 13^h 47^m 30^s after mean sunrise on Thurs., 22 March, while the moment of mean Mēsha-saṁkrānti was (§ *290, x*) 2^d 3^h 32^m 30^s later, or 6^h 40^m before mean sunrise on Sunday, 25 March. Adding the sun's motion for 6^h 40^m from Table LXV below, viz. 0·760495686 to 283·3, the *c* for mean sunrise on that Sunday is found to be 284·093829019.

A.D. 899, mean Mēsha-saṁkrānti having taken place on the previous day, Saturday, at $17^h\ 20^m$ after mean sunrise. Following general practice, I work for mean sunrise on the day on which the mean saṁkrānti occurred, i.e. for the Saturday, and deduct one day's values from the above.

Finally then the working values for the beginning of K.Y. 4000 (Sat., 24 Mar., A.D. 899, mean sunrise) are—

$$a = 2648{\cdot}921808551$$

$$b = 486{\cdot}863468853$$

$$c = 281{\cdot}355996857$$

301. The century Table LXXII below is prepared from these details by addition of century increases. All the centuries concerned except century 42, which was defective, are common ones, each of 36526 days.

Table LXXIII gives the increases of a, b, c for each year of the century,[1] following Lalla's bīja.

Table LXXIV gives the values to be added for the days intervening between that on which true Mēsha-saṁkrānti occurred in each year and the day of the corresponding beginning of the luni-solar year, i.e. the civil day called "Chaitra śukla 1." This Table is prepared for the purpose of assisting workers to check the main Table entries giving the values of a, b, c (*Table LXI, cols. 23-25*). The week-day stated in the main Table will always serve as a guide. Compare the similar Table in my article on the *Siddhānta-śirōmaṇi* (*Vol. XV, pp. 159-245 above*) where instructions for its use are given (§ *279*).

The Nakshatra.

302. A special note must be made regarding the working of the "*Indian Calendar*" rule (§ *156, p. 97*) for obtaining approximately the index of the nakshatra.

It will be observed there that part of the process (see § *133, Ind. Cal.*) consists of the addition to the value of c, the sun's mean long., of a constant, viz. 7207, as stated in 10,000ths of circle. This is the *Sūrya-Siddhānta* quantity. For work by the *Ārya-Siddhānta* we require the *Ārya-Siddhānta* quantity.

The *Sūrya-Siddhānta* figure is made up of (i) long. of sun's perigee-point ($257°\ 15'\ 55''{\cdot}7 =$) 7146·3 and (ii) 60·4, the greatest equation of the sun's centre.

Now (i) the long. of the sun's perigee-point according to the *Ārya-Siddhānta* is always 258°, or, in 10,000ths of circle, 7166·6̇ (§ *290, v, above*); and (ii) the greatest equation of the sun's centre (§§ *295, 296*) is 59·6875. Hence the *Ārya-Siddhānta* constant for calculating the nakshatra is ($7166{\cdot}6 + 59{\cdot}6875 =$) 7226·3542; and for approximate calculation is 7226, not 7207.

[1] There appear to be two misprints in Prof. Jacobi's Table VI (*above, Vol. XI, p. 165*), in which he gives similar annual increases. Against year 8, under "c," "61" should be "6"; and against year 52, under "a," "16312" should be "16352."

Thus the rules for finding the nakshatra by the *Ārya-Siddhānta* are as follows:—

A. Roughly. Find a, b, c and t in whole numbers; multiply c by 19; add 7226 to the result; from this subtract "equation c." The result is s, the sun's true longitude.

B. More closely. Find a, b, c and t with the fractions in decimals; to the value of c multiplied by 10, or, with the decimal point one place to the right, add the constant 7226·3542; from the result deduct (including decimals) the amount of "equation c." The result is s in full detail. $s+t=n$, the index of the nakshatra, with which turn to Table LXVIII for value of the nakshatra.

The work is shewn in Example 7 below.

EXAMPLES.

Example 1. To find the a, b, c values for mean sunrise on the first civil day of the luni-solar year.

Rule. Add together the entries in Tables LXXII and LXXIII for the corresponding expired year of the Kaliyuga, and those in Table LXXIV for the number of days' interval from true Mēsha-saṅkrānti (*Table LXI, col. 13, bracket-number*) to the first civil day of the luni-solar year, called "Chaitra śukla 1" (*col. 19, bracket-number*). Note specially the week-day of Chaitra śukla 1, and work for that day.[1] *Decimals need not be used except in close cases.*

For an example I take the year A.D. 1110-11. It corresponds (*Table LXI*) to K.Y. 4211 expired. The entries shew that true Mēsha-saṅkrānti occurred on Day 83 (Thursday, 24 March, A.D. 1110), and Chaitra śukla 1 on Day 82, the day previous. Interval between them 1 day.

Full work with the decimals:—

	w.-d.	*a.*	*b.*	*c.*
(*Table LXXII*) *Beginning of K.Y. cont. 42* . . .	(0)	384·5799	662·5608	282·0784
(*Table LXXIII*) *Beginning of year 11*	(0)	622·3697	819·7442	0·4230
(*Table LXXIV*) *Interval of days, 1*	(4)	8984·1044	891·1251	991·7866
At mean sunrise on Day 82, or on (4) Wednesday, 23 March, A.D. 1110	(4)	9991·5540	373·4301	274·2880

These are the entries for that day in Table LXI.

The same result can be obtained by first finding the a, b, c for mean sunrise of the day on which true Mēsha-saṅkrānti took place, and then deducting the values for the intervening

[1] Owing to the formation of the several Tables the interval of days measured by their bracket-numbers in Table LXI, cols. 13, 19, sometimes differs by 1, but never by more than 1. But this leads to no difficulty when the desired week-day is duly noted. The point to remember is that the resulting week-day in our addition must be the correct one as given in Table LXI, and that we must use the entries in Table LXXIV for such number of days as will make the final week-day the one we work for.

days as given in Table LXIV. [The day on which true Mesha-samkrānti took place is, in Table LXXIV, the day "Mēsha 0" (*col.* 2).]

Thus:—

	w.-d.	*a.*	*b.*	*c.*
(*Table LXXII*) *As before* . .	(0)	384·5799	662·5608	282·0784
(*Table LXXIII*) *Do.* . .	(0)	622·8697	819·7442	0·4230
(*Table LXXIV*) "*Mēsha 0*" .	(5)	9322·7363	927·4168	994·5244
At mean sunrise on day of true Mēsha-samkrānti, (5) *Thursday*, *24 March* (*Day 83*) . .	(5)	330·1859	409·7218	277·0258
(*Table LXIV*) *Less 1 day interval*	−1	−338·6319	−36·2916	−2·7378
At mean sunrise on Day 82, (4) *Wed.*, *23 March* . . .	(4)	9991·5540	373·4302	274·2880

The result is the same as above.

Example 2. The same for a year with a greater interval of days between Mēsha-samkrānti and Chaitra śukla 1.

Take the year A.D. 1603, K.Y. 4704 expired. The interval of days from true Mēsha-samkrānti (*Table LXI*, *col.* 13) back to Chaitra śukla 1 (*col.* 19) (mean sunrise in both cases) is (87−62) 25.

First process—with full decimals:—

	w.-d.	*a.*	*b.*	*c.*
(*Table LXXII*) Cent. 47 . .	(6)	4385·0933	565·5125	281·1467
(*Table LXXIII*) Year 4 . .	(5)	4741·1679	22·0623	999·9049
(*Table LXXIV*) Interval 25 days	(1)	856·9394	20·1262	926·0798
At mean sunrise on Day 62, or Chaitra śukla 1, (5) Thursday, 3 March, A.D. 1603 . .	(5)	9983·2006	607·7010	207·1314

These are the entries in Table LXI.

Second process:—

	w.-d	*a.*	*b.*	*c*
(*Table LXXII*) Cent. 47 . .	(6)	4385·0933	565·5125	281·1467
(*Table LXXIII*) Year 4 . .	(5)	4741·1679	22·0623	999·9049
(*Table LXXIV*) "Mēsha 0" .	(5)	9322·7363	927·4168	994·5244
At mean sunrise of (*Day 87*) Mēsha-samkrānti day, (2) Mon., 28 March, A.D. 1603 . .	(2)	8448·9975	514·9916	275·5760
(*Table LXIV*) Less for 25 days' interval . .	−(4)	−8465·7968	−907·2906	−68·4446
At mean sunrise on Day 62 .	(5)	9983·2007	607·7010	207·1314

Result, the same.

Computation of a date.

Example 3. We will now take a suppositious Record-date, and in the following examples explain the complete method of work for proving the accuracy of all its details; and for settling some other matters.

The date is "Śaka 1148 expired, K.Y. 4327, Vyaya, Saturday, Bhādrapada śukla 5, Kanyā 1, Bāva karaṇa, nakshatra Viśākhā, yōga Vaidhṛiti, Kanyā lagna."

Table LXI shews that the year corresponded to A.D. 1226-27; that in that year true Mēsha-saṁkrānti took place 3^h 55^m after mean sunrise on Wed., 25 March (Day 84 from 1 Jan.); that the civil day Chaitra śukla 1 was Sunday, 1 March (Day 60 from 1 Jan.); and that (*col. 3*) the lunar month Ashāḍha was intercalated in that year. The year was called "Vyaya" in South India, "Vikṛita" in the North.

The interval of days between the initial days of the solar and luni-solar year was (84 − 60) 24.

In this example we work for the values of a, b, c and t at mean sunrise of the day Chaitra śukla 1, which is stated in Table LXI to have been (*col. 20*) a Sunday. We work by the first process shewn above, and with full decimals. In using Table LXXIV for the interval of days—24 as already stated—it is observed that the week-day number (*col. 3*) for that number of days' interval (*col. 1*) is 2, and that, since the week-days obtained for the year from Tables LXXII, LXXIII are respectively 6 and 6, total 12, the addition of 2 will make total 14, or 0, or a Saturday, whereas the day we are working for was Sunday. Hence we use the figures for 23 days' interval, week-day 3, which gives us the correct a, b, c for 1 Sunday. (*See note to Example 1.*)

	w.-d.	*a*	*b.*	*c.*
(*Table LXXII*) K.Y. Cent. 43 .	(6)	8913·7771	214·1179	279·7019
(*Table LXXIII*) Year 27 . .	(6)	9587·5412	907·9933	0·0428
(*Table LXXIV*) 23 days' interval	(3)	1534·2032	92·7094	931·5554
At mean sunrise on (1) Sunday, 1 March, A.D. 1226, i.e. the day Chaitra śukla 1 . . .	(1)	35·5215	214·8206	211·3001

The above work has been thus fully carried out in order to prove the correctness of the entries in Table LXI, cols. 23, 24, 25, which are the same. This work is not required to be done in practice as the Table provides the information.

Now knowing the Table entry to be accurate, we proceed.

The tithi. Ordinary work.

Example 4. The true tithi.[1] The given date is Bhādrapada śukla 5. Table LXIII A shews that, Ashāḍha having been intercalated in the year in question and Bhādrapada being therefore the seventh, and not the sixth, lunar month of the year, it began about 177 days after the day Chaitra śukla 1; consequently Bhādr. śuk. 5 was about 181 days after. Having added

[1] The mean tithi (and probably the mean nakshatra and yoga also) was used in earlier years—to how late a date is not yet known. The mean tithi is the mean moon's distance from mean sun, our a. To find it add to the ascertained value of a (as in Example 3) for the day the sum of the greatest equations of moon and sun, i.e. 199·1150. The total gives the a of the mean tithi (= t of the true tithi). Thus for the day in question the mean tithi-index is (35 + 199) 235, or (35·5215 + 199·1150) 234·6365. This was its value at mean sunrise of the given day.

the values of a, b, c for 181 days to those already found for Chaitra śukla 1, the equations of b and c are added from Tables LXVI, LXVII approximately, or from Tables LXVI A, LXVII A in very close and doubtful cases, to the resulting value of a for the day; thus t, the true tithi-index, is found.

In this example we work approximately.

The serial number of the day Chaitra śukla 1 (in March A.D. 1226) is 60 and the week-day 1. Sunday (Example 3). The a, b, c for mean sunrise have been settled in Example 3.

	d.	*w.-d.*	*a.*	*b.*	*c.*
Table LXI, cols. 19-25 . .	(60)	(1)	36	215	211
(*Table LXIV*)	(181)	(6)	1292	569	196
At mean sunrise on day . .	(241)	(0)	1328	784	707
(*Table LXVI*) "Eqn. *b*" . .			3		
(*Table LXVII*) "Eqn. *c*" . .			117		

At mean sunrise on day 241, t=1448=(Table LXVIII) śukla 5.

Day 241 was (Table LXIX) August 29. Week-day 0=Saturday. Reference to Table LXXI confirms this as the right week-day.

The given Hindu date then is so far correct. The 5th śukla tithi of Bhādrapada ended on, and gave its name to, Sat., 29 Aug., A.D. 1226. For historical purposes it is seldom necessary, unless the karaṇa is mentioned, to find the time of beginning and ending of the tithi; but, if required, this is obtained approximately from Tables LXVIII, col. 3, and LXIX. At mean sunrise the tithi-index was 1448. It began (1448—1333 =) 115, or (Table LXX) 8^h 9^m before, and ended (1667—1448 =) 219, or 15^h 31^m after mean sunrise on that Saturday.

Example 5. Working the same date with the full decimals, we have—

	d.	*w.-d.*	*a.*	*b.*	*c.*
			The tithi.	*Exact work.*	
As in Example 3 . .	(60)	(1)	35·5215	214·8206	211·3001
Table LXIV . . .	(181)	(6)	1292·3692	568·7839	495·5392
	(241)	(0)	1327·8907	783·6045	706·8393

For either equation b or equation c note the difference between the values of b or c thus found and the nearest value respectively in Table LXVI A or LXVII A, *cols. 2a, 2b*. Multiply this difference by the group-difference (*col. 4*). Divide the result roughly by 2 or exactly by 2·083; and add or subtract the result to or from the standard equation-value given in the Table (*col. 3*) as necessity demands.

[This is the complete process; but it almost always suffices to arrive very near to the truth merely by the exercise of common sense, using Tables LXVI A, LXVII A as Eye-Tables.]

Here the moon's anom. b is 783·6045, and the nearest amount of Argument b in Table LXVI A is 783·3, whose exact equation is 3·1006 (*col. 3*). As the difference in anom. is only about 0·3, viz. 0·2712, and the group-difference only 0·4150, we may take 3·1006 as the required equation of the given anom. Or we may work roughly by a multiplication of the first two decimals of the anom. diff. (0·27) by those of the group-diff. (0·42) and a division of the result by 2—yielding 0·0567, which, added to 3·1006, makes "equation b"=3·1573, or we may work completely with all four decimals, arriving at the absolutely correct result 3·1546.

The sun's anom. (*c*) is 706·8393. The equation is similarly found by use of Tables LXVII or LXVII A. The nearest amount of "Argument" in Table LXVII A is 706·2500. Full work is as follows:—Diff. in anom. 0·5893. This, multiplied by the group-difference (*col. 4*) 0·2257, is 0·133005. This, divided by 2·083, is 0·0638. The equation of anom. 706·2500 is (*col. 3*) 117·1181. This plus 0·0638=117·1819, the exact equation required.

Applying, as before, these exact equations of the values of anom. *b* and *c* to the value of *a*, we have—

	a.
As already found . .	1327·8907
Equ. *b*	3·1546
Equ. *c*	117·1819
The tithi-index, t, =	1448·2272

By the work as in Example 4 the tithi-index (*t*) at mean sunrise was 1448.

The karana.

Example 6. The karana is half a tithi. See Table LXVIII, cols. 4, 5. For the date we are examining (*Examples 3, 4, 5*), viz. śukla 5 (*Table, col. 2*), the two karanas are Bāva and Bālava. The tithi began (*end of Example 4*) $8^h\ 9^m$ before and ended $15^h\ 31^m$ after mean sunrise on 29 Aug. A.D. 1226. Its length was $23^h\ 40^m$. Half of this is $11^h\ 50^m$. Thus Bāva was the karana from $8^h\ 9^m$ before to $3^h\ 41^m$ after mean sunrise on 29 Aug., and Bālava was the karana from $3^h\ 41^m$ to $15^h\ 31^m$ on that day. Since the karana mentioned in the given date was Bāva, the action referred to in the record must have taken place between mean sunrise and $3^h\ 41^m$ later on 29 Aug. 1226, i.e. roughly between 6·0 and 9·41 A.M. on that day.

The nakshatra.

Example 7. Required the nakshatra of the same day, month and year as in Examples 3, 4, 5, 6.

A nakshatra, or lunar mansion, is, in the equal-space system, a 27th part of the complete journey of the moon in a lunar month through the circle of the stars. Our nakshatra-index shews in which of these parts the moon was at any given moment. In these examples we are working for the true, not mean, moon's place. Each of these 27 parts has its own nakshatra-name and yoga-name (*see Example 8*). In the systems of Garga and the *Brahma-Siddhānta* the divisions of the constellation-circle are unequal, being designed more nearly to suit the positions of the principal stars[1]; but the names of the divisions are the same as in the equal-space system.

The indices of the beginning and ending points of the nakshatras are stated, in 10,000ths of the circle, in Table LXVIII. The same in degrees are given, together with those of the zodiacal solar signs, in "*Indian Chronography*," Table XXII.

(A) The rule for finding the nakshatra roughly, when working with only whole numbers, is as follows:—Take the *c* of the date; multiply it by 10; add the constant 7226 (*see* § *302 above*); and deduct the amount of "equation *c*." This gives *s*, the sun's true longitude at mean sunrise of the given day. Add *s* to *t* and the result is *n*, the nakshatra-index. Reference with this index to Table LXVIII (*col. 8, or 9, or 10*) shews the nakshatra required, i.e. the

[1] Mr. G. R. Kaye, in his "*Astronomical Observatories of Jai Singh*" (p. 117), gives the actual lat. and long. of the stars after which the nakshatras were named.

true moon's place amongst the constellations at mean sunrise, stated in 10,000ths of the circle. The moon's place in degrees, minutes, and seconds can be found by Table XLV B, Vol. XIV above.

Thus, by the figures in Example 4:—

$c \times 10$	$=7070$
Constant	$+7226$
	4296
Less eqn. c	$-\ 117$
Sun's true long., s	$=4179$
Tithi-index. t,	$+1448$
Nakshatra-index n	$=5627$ — (*Table LXVIII, cols. 8, 9, 10*) Viśākha, by all systems.

This is approximately correct

(B) Greater exactness can be obtained by using the decimals, thus—

$c \times 10$	$=7068{\cdot}3930$
Constant	$+7223\ 3542$
	$4294{\cdot}7472$
Less eqn. c	$-\ 117{\cdot}1819$
s	$=4177\ 5653$
t	$+1448{\cdot}2272$
n	$=5625{\cdot}7925$

There is here a little difference in the resulting nakshatra-index, which may in some cases be as great as nearly 10 units owing to the roughness of the earlier method.

(C) The value of s at mean sunrise of the day in question can also be obtained easily by my Tables for the sun's true longitude for each day of the solar year given in Vol. XIV above. The following shews method of work:—

In the present case the serial number of the day in question was 241. True Mēsha-saṁkrānti took place (*see Example 3*) on Day 84 at $3^h\ 55^m$ after mean sunrise. The day of our date was (241 − 84) the 157th period (each of 24 hours) after the moment of true Mēsha saṁkrānti. On this 157th day at $3^h\ 55^m$ after mean sunrise the sun's true longitude, s, was, in 10,000ths of circle, 4182·0049 (*Table XLVIII A, Vol. XIV above, p. 52, col. 9*) Deduct the values for 3 hours (*Table XLIX, p. 54, sun's true motion on that 157th day*) and 55^m (*Table L, mean motion in minutes*), viz., respectively, 3·3852 and 1·0157, total 4·4009.

	4182 0049
	− 4·4009
At mean sunrise	$s=4177\ 5740$

This is the value of s at mean sunrise of the 23 August of our date, and, added to t (4177·5740 +1448·2272), it gives us the correct nakshatra-index 5625 8012, shewing a slight difference of 0·0087 in results.

If, for even greater accuracy, instead of using the value of the sun's *mean* motion in 55^m, we had worked by his *true* motion on that 157th day, viz. by dividing by 60 his true motion in 1 hour (*Table XLIX, p. 54*) and multiplying the result by 55, we should have found n = 5625·8092.

This method C, for finding the sun's longitude s, is believed to be absolutely accurate and should be relied on in case of doubt.

[For a note on the nakshatra see the next example.]

The yōga.

The nakshatra (*Example 7*), as quoted in the given date, shews in which of the 27 sidereal divisions the moon stood at the moment in question, or the extent of the moon's journey from celestial long. 0°. The yōga deals with the combined journeys of both sun and moon.

To find, therefore, the index of the yōga at mean sunrise of the given day we have to add the long. of the true sun to the long. of the true moon at that moment. But the long of the true moon is the index n, i.e. the nakshatra-index already found. And the long. of the sun is the index s, also already found (*Example 7*).

Hence the yōga-index $(y) = s + n$; or, since $n = s + t$ (*Example 7*), $y = 2s + t$. The latter formula makes it easy to find the yōga when it is unnecessary to find the nakshatra.

At mean sunrise of 29 Aug. A.D. 1226 we have found that s = 4177·5653 and that n = 5625·7925; hence the yōga-index (y) = 9803·3578, and (Table LXVIII) the yōga of the day was 27 Vaidhṛiti.

The several saṁkrāntis.

Example 9. To find the values of a, b, c and t at the moments of the several solar saṁkrāntis in the given year, and thereby to find whether a lunar month was common, intercalary (*adhika*), or suppressed (*kshaya*).

A saṁkrānti takes place when the sun touches the point of a zodiacal sign, i.e. when he reaches long. 30°, 60°, etc. When, at the first of two such successive occurrences, the true moon is waning and at the second is also waning, or at the first is waxing and at the second is also waxing, the lunar month is common. If the moon is waning at the first and waxing at the second, the lunar month is repeated. It is intercalary (*adhika*). When the moon is waxing at the first and waning at the second, the lunar month is altogether suppressed (*kshaya*).

Thus it is necessary to find the a, b, c for the moment of the astronomical beginning of the solar year, the actual moment, that is, of the true Mēsha-saṁkrānti, and add to their values their respective increases during the several true solar months, thus obtaining the a, b, c for the moments of the true saṁkrāntis concerned. Adding to the value of a at the moment of a saṁkrānti the values of "equation b" and "equation c" (as in the former examples), we find the index of the tithi t, which shews whether the true moon was waxing or waning at the moment.

The date and time of the true Mēsha-saṁkrānti is given in Table LXI, cols. 13, 14, 17. The intervals in time to each subsequent saṁkrānti, and the collective intervals to each, are given in Table LXIII B, cols. 8 and 3; and the corresponding increases in the values of a, b, c are given in the same Table, cols. 9, 10, 11 and 4, 5, 6.

We will consider the conditions for the first few saṁkrāntis of the same year as in Examples 3-8, viz. A.D. 1226-27, K.Y. 4327, Śaka 1148.

First we have to ascertain the values of a, b, c at the moment of true Mēsha saṁkrānti which took place (*Table LXI, cols. 13, 14, 17*) at $3^h\ 55^m$ after mean sunrise on Day 84, namely Wednesday, 25 March, A.D 1226 The a, b, c for mean sunrise of Day 60, Sunday, 1 March, the day of Chaitra śukla 1, are given in cols. 23, 24, 25 of the same Table. Interval between the two, whole days, (84−60=) 24. Taking down the a, b, c for 25 March and adding their increase for $24^d\ 3^h\ 55^m$ from Tables LXIV. LXV, we find the values of a, b, c at the moment of true Mēsha-saṁkrānti, as required.

Table LXIII B gives us the exact interval in time and the amount of increase of a, b, c, during that interval, up to the moment of every subsequent saṁkrānti in the year. In close cases, of course, full decimals can be used and the equation-values very carefully examined, but in general it is only necessary to use whole numbers, as in this example. Only in a doubtful case need we do more.

We desire, let us suppose, to ascertain, from the values of t at the respective Mithuna and Karka-saṁkrāntis, whether the moon was waxing or waning at the moments of their occurrence. The work is as follows:—

	d.	*v.-d.*	*a.*	*b.*	*c.*
Mean sunrise, Chait. suk. 1 (Table LXI) .	60	1	36	215	211
24 days' increase (Table LXIV) . . .	24	3	8127	871	66
3 hours' do. (Table LXV) . . .			42	5	0
55 minutes' do. (do.) . . .			13	1	0
At moment of true Mēsha-saṁkrānti . .	84	4	8218	92	277
Interval to Mithuna-saṁk. (T. LXIII B, left side)			+1105	262	171
At moment of Mithuna-saṁkrānti . .			9323	354	448[1]
Eqn. b (Table LXVI) . . .			250		
Eqn. c (Table LXVII) . . .			41[1]		
			$t = 9614$		

This value of t shews that at the Mithuna-saṁkrānti the moon had not reached the point of new moon when $t = 10{,}000$. She was still waning.

	a.	*b.*	*c*
At moment of Mithuna-saṁkrānti, as above . . .	9323	354	448
Interval to Karka-saṁk. (T. LXIII B, cols. 9, 10, 11) .	703	147	47
At moment of Karka-saṁkrānti	26	501	535[1]
Eqn. b (Table LXVI)	138		
Eqn. c (Table LXVII)	73[1]		
	$t = 237$		

[It is not really necessary, when it is seen that a (here 26) is greater than 0, to add the equations, because the value of a proves that the moon had begun a new synodical revolution and was waxing.]

The value of t (and a) shews that the moon was waxing at the Karka-saṁkrānti. Thus the lunar month Āshādha (*see cols. 1, 2, Table LXIII B*) was intercalated in the given year.

The place of the moon at the moments of the later saṁkrantis is obtained, if required, by a continuation of similar work and the use of Table LXIII B.

[1] See note to Table LXIII B. These values are given in the auxiliary Table. At the Mithuna-saṁkrānti c is always 448·0577 and eqn. c always 40·5649. At the Karka-saṁkrānti c is always 534·6213 and eqn. c always 72·5193

Days of the solar year.

Example 10. To find the day and week-day of the solar year corresponding to any given day in the lunī-solar year.

The moment of true Mēsha-samkrānti, as given in Table LXI, cols. 13, 14, 17, marks the astronomical beginning of the solar year. In different parts of India (see *Indian Calendar*, § 28, p. 12, and *Indian Chronography*, § 43, pp. 18, 19) there are different rules for fixing the first day of the solar month, which is sometimes the same day, sometimes the next day, sometimes (in Bengal) the third day. In the present case we imagine the record to have come from the Tamil country and we work by the Tamil rule.

In the given year (*Example 5*), A.D. 1226, true Mēsha-samkrānti took place on Day 84 (measured from Jan. 1), Wednesday, 25 March, at 3^h 55^m after mean sunrise, and that Wednesday was the day "1 Mēsha" since the samkrānti occurred before sunset.

The days in Mēsha follow regularly. But to find the first civil day of each successive month in the year we must establish the moment when each samkrānti took place. This information is obtained from Table LXIII B.

We have determined the given date to be (*see Examples 4, 5*) the serial day 241 measured from Jan. 1, and the 157th day after the day on which Mēsha-samkrānti occurred, which was Day 84. Turn to Table LXIII B. Kanyā began 156 days after true Mēsha-samkrānti, so our date will be in the solar month Kanyā. Calculate the moment of occurrence of the Kanyā-samkrānti in the given year from the same Table.

	d.	*w.-d.*	*h.*	*m.*	*s.*
(*Table LXI*) *True Mēsha-samkrānti* . .	(84)	(4)	3	55	0
(*Table LXIII B*) *Interval to Kanyā-samk.* .	(156)	(2)	10	24	25
Moment of Kanyā-samkrānti . . .	(240)	(6)	14	19	25

By Tamil rule, since the samkrānti took place after sunset, or 12^h Laṅka time, viz. at 14^h 19^m 25^s after mean sunrise, the civil day "1 Kanyā" was not (6) Friday (Day 240), 28 August, the day of the samkrānti, but was Saturday (Day 241), 29 August.

And this Saturday happens to have been the very day of our record, which day was in solar-year reckoning "1 Kanyā."

[Observe that, if the record had come from Bengal, its solar date would have been the same, since the samkrānti occurred before midnight on Friday and the Saturday was therefore "1 Kanyā." Had it come from Orissa, the Saturday would have been "2 Kanyā," since the first day of the solar month is, in that country, always the day of the samkrānti, and so "1 Kanyā" was the Friday. By the Malabar Rule "1 Kanyā" was Saturday.]

The lagna.

Example 11. On the day in question (*Example 7*) it has been established that at mean sunrise the sun's true long. *s*, in 10,000ths of the circle, was 4177·5653. To calculate the lagna we must have *s* in degrees, etc., which can be calculated by Table XLV B, Vol. XIV above, or by Tables XLVIII A, XLIX, L, in the same volume. We work by the latter.

The day of the record was the 157th after true Mēsha-samkrānti, which took place 3^h 55^m after mean sunrise on the day of its occurrence. Table XLVIII A (p. 32) shews that at 3^h 55^m after mean sunrise 157 days later the sun's true long., *s*, was 150° 33′ 7″·84. Deduct his motion (true) for 3^h by Table XLIX (p. 54), viz. 7′ 18″·72, and (mean) for 55^m by Table L, viz. 2′ 15″·52, total 9′ 34″·24. Then *s* at mean sunrise was 150° 23′ 33″·60.

The long. of the point of rising of Kanyā is (*Indian Chronography, Table XXII*) 150°, and that sign ends at 180°. Take the ending-point and calculate the distance between it and the sun at mean sunrise, 180° − 150° 23′ 33·60 = 29° 36′ 26″·40. There is no need here for

great accuracy, and we take this as 29° 36′. Turn this into time by multiplying the degrees by 4^m, and the minutes by 4^s. Result $1^h\ 58^m\ 24^s$.

Thus on the given day Kanyā was lagna from very shortly before till about $1^h\ 58^m$ after mean sunrise.

In examining the given date in the matter of the karaṇa (*Example 6*) we found that the action referred to in the record must have taken place between mean sunrise and $3^h\ 41^m$ later or between 6.0 and 9.41 A.M. on Sat., 29 Aug., A.D. 1226. The mention of the lagna still further reduces the time and shews that the action referred to must have taken place between mean sunrise and a time $1^h\ 58^m$ later; or between 6.0 and 7.58 A.M. on that day.

NOTE.

The above examples may, perhaps, strike the uninitiated as involving an immense amount of complicated work in order to obtain the desired result. But such is by no means the case. Every date can be calculated in whole numbers at first, and it is very seldom that the decimals need be resorted to. They are provided for the purpose of deciding doubtful cases where very great accuracy is required.

For all the details of the given date,—and it is very seldom that so many are stated in an inscription or grant,—the following exemplifies all the work necessary to be done to put us in full possession of the facts. In about a quarter of an hour we learn everything that has to be learned; and, when less details are given, their accuracy can be proved or disproved in a few minutes. What follows shews the ordinary work to be done for the date given in Examples 3-10.

Given year = Śaka 1148, K.Y. 4327, Vyaya, A.D. 1226-27.

	d.	*w.-d.*	*h.*	*m.*	*s.*	*d.*	*w.-d.*	*a.*	*b.*	*c.*
1 Mēsha =	(84)	(4)	3	55	0	(60)	(1)	36	215	211
	(156)	(2)	10	24	25	(181)	(6)	1292	569	496
	(240)	(6)	14	19	25	(241)	(0)	1328	784	707
1 Kanyā =	(241)	0 Sat. 29 Aug.						3		
								117		

1448 − 1333 = 115 = $8^h\ 9^m$

1667 − 1448 = 219 = $15^h\ 31^m$

t = 1448 Bhādr. śuk. 5

c = 7070 + 7225 = 4296 − 117 = s = 4179

s = 4179 → 4179 × 2 = 8358

t = 1448 → + 1448

n = 5627

n = Viśākhā y = 9806

y = Vaidhṛiti

	8^h	9^m
	15	31
	2)23	40
Total Bāva .	11	50
	− 8	9
Bāva on Sat. 29 Aug.	= 3	41

(The lagna requires a short calculation by itself.)
The above decides the solar month, day and week-day.
" " " " luni-solar month, day and week-day.
" " " " tithi.
" " " " karaṇa.
" " " " nakshatra.
" " " " yōga.
" " " " the positions of sun and moon, their longitudes, and distance from another.
" " " " the time of day referred to, within 2 hours.

TABLE A.

DIFFERENCES IN THE CALENDAR BETWEEN ĀRYA AND SŪRYA SIDDHĀNTA FIXTURES.

Cols. 1, 2.—The number of the year here given is the one generally used in records of the year A.D. noted in column 3, and is stated here so as to catch the eye readily. In referring to the main Table LXXI the number of the year in columns 1, 2 therein is the present number advanced by 1, being the corresponding concurrent year.

Col. 4, Class A.—Different saṁvatsara-names given to solar and luni-solar years.

Col. 4, Class B.—Intercalations and suppressions of different lunar months. "adh."=an intercalated (adhika) months; "ksh," a suppressed (kshaya) month.

Col. 4, Class C.—Differences in the civil day called "Chaitra Śukla 1," the civil beginning of the luni-solar year. The figure in brackets in columns 5, 6 is the number of the civil day measured from January 1st.

K. Y. expired.	Śaka expired.	A. D.	Class.	FIXTURES ACCORDING TO THE	
				First Ārya-Siddhānta.	Sūrya-Siddhānta.
1	2	3	4	5	6
4007	828	906-7	A	1 "Prabhava" . . .	60 "Kshaya."
4008	829	907-8	A	2 "Vibhava" . . .	1 "Prabhava."
4009	830	908-9	A	3 "Sukla"	2 "Vibhava."
4075	896	974-75	B	4 Āshādha (adh.) . . .	3 Jyēshṭha (adh.)
4080	901	979-80	B	6 Bhādrapada (adh.) . .	3 Jyēshṭha (adh.).
4092	913	991-92	A	27 "Vijaya"	26 "Nandana."
4093	914	992-93	A	28 "Jaya"	27 "Vijaya."
4094	915	993-94	A	29 "Manmatha" . . .	28 "Jaya"
4095	916	994-95	A	30 "Durmukha" . . .	29 "Manmatha."
4159	980	1058-59	B	4 Āshāḍha (adh.) . . .	3 Jyēshṭha (adh.).
4177	998	1076-77	A	53 "Siddhārthin" . . .	52 "Kālayukta."
4178	999	1077-78	A	54 "Raudra" . . .	53 "Siddhārthin."
4179	1000	1078-79	A	55 "Durmati" . . .	54 "Raudra."
4180	1001	1079-80	A	56 "Dundubhi" . . .	55 "Durmati."
4193	1014	1092-93	C	11 Mar. (71), 5 Thur. . .	12 Mar. (72), 6 Fri.
4232	1053	1131-32	B	5 Śrāvaṇa (adh.) . . .	4 Āshāḍha (adh.).
4251	1072	1150-51	B	5 Śrāvaṇa (adh.) . . .	4 Āshāḍha (adh.).
4256	1077	1155-56	B	*Nil* . . .	12 Phālguna (adh.).
4257	1078	1156-57	B	1 Chaitra (adh.) . . .	*Nil.*
id.	id.	id.	C	23 Feb. (54), 5 Thur. . .	24 Mar. (84), 0 Sat.
4262	1083	1161-62	A	19 "Pārthiva" . . .	18 "Tāraṇa."
4263	1084	1162-63	A	20 "Vyaya" . . .	19 "Pārthiva."

TABLE A—*Contd.*

K. Y. expired.	Śaka expired.	A. D.	Class.	Fixtures according to the First Ārya-Siddhānta.	Sūrya-Siddhānta.
1	2	3	4	5	6
4264	1085	1163-64	A	21 "Sarvajit" . . .	20 "Vyaya."
4265	1086	1164-65	A	22 "Sarvadhārin" . . .	21 "Sarvajit."
4313	1134	1212-13	B	7 Āśvina (adh.) . . . 11 *Māgha* (*ksh.*) . . . 12 Phālguna (adh.) . .	7 Āśvina (adh.).
4348	1169	1247-48	A	46 "Paridhāvin" . . .	45 "Virōdhakṛit."
4349	1170	1248-49	A	47 "Pramādin." . . .	46 "Paridhāvin."
4350	1171	1249-50	A	48 "Ānānda" . . .	47 "Pramādin."
4351	1172	1250-51	A	49 "Rākshasa" . . .	48 "Ānanda.
4356	1177	1255-56	C	11 Mar. (70), 5 Thur. . .	10 Mar. (69), 4 Wed.
4378	1199	1277-78	B	9 Mārgaśira (adh.) . . 10 *Pausha* (*ksh.*) . . 12 Phālguna (adh.) . .	8 Kārttika (adh.). 10 *Pausha* (*ksh.*). 12 Phālguna (adh.).
4397	1218	1296-97	B	12 Phālguna (adh.) .	9 Mārgasira (adh.). 10 *Pausha* (*ksh.*). 12 Phālguna (adh.).
4416	1237	1315-16	B	12 Phālguna (adh.) .	8 Kārttika (adh.). 9 *Mārgaśira* (*ksh.*). 12 Phālguna (adh.).
4433	1254	1332-33	A	12 "Bahudhānya" . .	11 "Īsvara."
4434	1255	1333-34	A	13 "Pramāthin" . . .	12 "Bahudhānya."
4435	1256	1334-35	A	14 "Vikrama" . . .	13 'Pramāthin."
4436	1257	1335-36	A	15 "Vṛisha" . . .	14 "Vikrama."
4454	1275	1353-54	B	7 Āśvina (adh.) . . . 11 *Māgha* (*ksh.*) . . . 12 Phālguna (adh.) . .	6 Bhādrapada (adh.).
4471	1292	1370-71	B	3 Jyēshṭha (adh.) . .	2 Vaiśākha (adh.).
4481	1302	1380-81	B	*Nil.*	8 Kārttika (adh.). 9 *Mārgaśira* (*ksh.*).
4492	1313	1391-92	B	7 Āśvina (adh.) . . .	6 Bhādrapada (adh.).
4509	1330	1408-9	B	3 Jyēshṭha (adh.) . .	2 Vaiśākha (adh.).
4511	1332	1410-11	B	7 Āśvina (adh.) . . .	6 Bhādrapada (adh.)
4518	1339	1417-18	A	38 "Krōdhin" . . .	37 "Śōbhana."
4519	1340	1418-19	A	39 "Viśvāvasu" . .	38 "Krōdhin."
id	id.	id.	B	8 Kārttika (adh.) . . 11 *Māgha* (*ksh.*) . . . 12 Phālguna (adh.) . .	8 Kārttika (adh.).
4520	1341	1419-20	A	40 "Paṛābhava" . . .	39 "Viśvāvasu."
4521	1342	1420-21	A	41 "Plavaṅga" . . .	40 "Parābhava."
4537	1358	1436 37	C	18 Mar. (78), 1 Sun. . .	19 Mar. (79), 2 Mon.
4557	1378	1456-57	B	8 Kārttika (adh.) . . 10 *Pausha* (*ksh.*) . . . 12 Phālguna (adh) . .	8 Kārttika (adh.).
4566	1387	1465-66	B	2 Vaiśākha (adh.) . .	1 Chaitra (adh.).

TABLE A—*Contd.*

K. Y. expired.	Śaka expired.	A. D.	Class.	Fixtures according to the	
				First Ārya-Siddhānta.	Sūrya-Siddhānta.
1	2	3	4	5	6
4574	1395	1473-74	C	28 Feb. (59), 1 Sun. . .	27 Feb. (58), 0 Sat.
4576	1397	1475-76	B	7 Āśvina (adh.) . . . 10 *Pausha* (*ksh.*) . . . 12 Phālguna (adh.) . .	7 Āśvina (adh.). 11 *Māgha* (*ksh.*). 12 Phālguna (adh.).
4587	1408	1486-87	B	6 Bhādrapada (adh.) . .	5 Śrāvaṇa (adh.).
4603	1424	1502-3	A	4 "Pramōda" . . .	3 "Śukla."
4604	1425	1503-4	A	5 "Prajāpati" . . .	4 "Pramōda."
id.	id.	id.	B	2 Vaisākha (adh.) . .	1 Chaitra (adh.).
4605	1426	1504-5	A	6 "Āngirasa" . . .	5 "Prajāpati."
4606	1427	1505-6	A	7 "Śr mukha" . . .	6 "Āṅgirasa."
id.	id.	id.	B	6 Bhādrapada (adh.) . .	5 Śrāvaṇa (adh.).
4607	1428	1506-7	A	8 "Bhāva" . . .	7 "Śrīmukha."
4608	1429	1507-8	A	9 "Yuvan" . . .	8 "Bhāva."
4609	1430	1508-9	A	10 "Dhātṛi" . .	9 "Yuvan."
4610	1431	1509-10	A	11 "Īśvara" . . .	10 "Dhātṛi."
4611	1432	1510-11	A	12 "Bahudhānya" . .	11 "Īśvara."
4612	1433	1511-12	A	13 "Pramāthin" . . .	12 "Bahudhānya."
4613	1434	1512-13	A	14 "Vikrama" . . .	13 "Pramāthin."
4614	1435	1513-14	A	15 "Vṛisha"	14 "Vikrama."
4615	1436	1514-15	A	16 "Chitrabhānu" . .	15 "Vṛisha."
4622	1443	1521-22	B	*Nil.*	8 Kārttika (adh.). 9 *Mārgaśira* (*ksh.*).
4644	1465	1543-44	B	6 Bhādrapada (adh.) . .	5 Śrāvaṇa (adh.).
4659	1480	1558-59	C	21 Mar (80), 2 Mon. . .	20 Mar. (79), 1 Sun.
4660	1481	1559-60	B	8 Kārttika (adh.) . . . 11 *Māgha* (*ksh.*) . . . 12 Phālguna (adh.) . .	7 Āśvina (adh.).
4679	1500	1578-79	B	8 Kārttika (adh.) . . .	7 Āśvina (adh.).
4682	1503	1581-82	C	6 Mar. (65), 2 Mon. . .	5 Mar. (64), 1 Sun.
4689	1510	1588-89	A	31 "Hēmalamba" . .	30 "Durmukha."
4690	1511	1589-90	A	32 "Vilamba" . . .	31 "Hēmalamba."
4691	1512	1590-91	A	33 "Vikārin" . . .	32 "Vilamba."
4692	1513	1591-92	A	34 "Śārvarin" . . .	33 "Vikārin."
4693	1514	1592-93	A	35 "Plava"	34 "Śārvarin."
4694	1515	1593-94	A	36 "Śubhakṛit" . . .	35 "Plava."

TABLE A—*Contd.*

K. Y. expired.	Śaka expired.	A. D.	Class.	Fixtures according to the	
				First Ārya-Siddhānta.	Sūrya-Siddhānta.
1	2	3	4	5	6
4695	1516	1594-95	A	37 "Śōbhana" . . .	36 "Śubhakṛit."
4696	1517	1595-96	A	38 "Krōdhin" . . .	37 "Śōbhana."
4697	1518	1596-97	A	39 "Viśvāvasu" . . .	38 "Krōdhin."
4698	1519	1597-98	A	40 "Parābhava" . . .	39 "Viśvāvasu."
id.	id.	id.	B	8 Kārttika (adh.) . . .	7 Āśvina (adh.).
4699	1520	1598-99	A	41 "Plavanga" . . .	40 "Parābhava."
4700	1521	1599-1600	A	42 "Kilaka" . . .	41 "Plavaṅga."
4701	1522	1600-1	A	43 "Saumya" . . .	42 "Kilaka."
4720	1541	1619-20	C	7 Mar. (66), 1 Sun. . .	6 Mar. (65), 0 Sat.
4731	1552	1630-31	C	4 Mar. (63), 5 Thur. . .	5 Mar. (64), 6 Fri.
4754	1575	1653-54	C	20 Mar. (79), 1 Sun. . .	19 Mar. (78), 0 Sat.
4757	1578	1656-57	C	17 Mar. (77), 2 Mon. . .	16 Mar. (76), 1 Sun.
4773	1594	1672-73	C	20 Mar. (80), 4 Wed. . .	19 Mar. (79), 3 Tues.
4774	1595	1673-74	A	57 "Rudhirōdgārin" . .	56 "Dundubhi."
4775	1596	1674-75	A	58 "Raktākṣha" . . .	57 "Rudhirōdgārin."
4776	1597	1675-76	A	59 "Krōdhana" . . .	58 "Raktākṣha."
4777	1598	1676-77	A	60 "Kshaya" . . .	59 "Krōdhana."
4778	1599	1677-78	A	1 "Prabhava" . . .	60 "Kshaya."
4779	1600	1678-79	A	2 "Vibhava" . . .	1 "Prabhava."
4780	1601	1679-80	A	3 "Śukla"	2 "Vibhava."
4781	1602	1680-81	A	4 "Pramōda . . .	3 "Śukla."
4782	1603	1681-82	A	5 "Prajāpati" . . .	4 "Pramōda."
4783	1604	1682-83	A	6 "Āṅgirasa" . . .	5 "Prajāpati."
4784	1605	1683-84	A	7 "Śrīmukha" . . .	6 "Āngirasa."
4785	1606	1684-85	A	8 "Bhāva" . . .	7 "Śrīmukha."
4786	1607	1685-86	A	9 "Yuvan" . . .	8 "Bhāva."
4801	1622	1700-1	B	7 Āśvina (adh.) . . .	7 Āsvina (adh.).
4802	1623	1701-2	B	11 *Māgha* (*ksh.*) . . .	*Nil.*
id.	id.	id.	C	1 Chaitra (adh.) . . .	29 Mar (88), 0 Sat.
4807	1628	1706-7	B	27 Feb. (58), 5 Thur. . .	3 Jyēshṭha (adh.).
4819	1640	1718-19	C	4 Āshāḍha (adh.) . . .	21 Mar. (80), 6 Fri.
4826	1647	1725-26	B	22 Mar. (81), 0 Sat. . .	3 Jyēshtha (adh.).
				4 Āshāḍha (adh.) . . .	

TABLE LXI.

NOTES.

Cols. 1 to 4.—The present Table states the *concurrent* years so as exactly to correspond with Table I of the "Indian Calendar" and in that respect to save trouble for those who have become accustomed to use that publication. The year usually quoted in inscriptions is the *expired* year, though sometimes the concurrent year is given; *e.g.*, the year A.D. 899-900 corresponds to the concurrent years K. Y. 4001, Śaka 822, but to the expired years K. Y. 4000, Śaka 821.

Col. 8.—All the entries are of intercalated (adhika) months, except those in italics, which are suppressed (*kshaya*) months.

A List of instances where in important details the Ārya and Sūrya differ is given in Table A at end of text.

It has not been thought necessary to include in this Table the years between A.D. 499 and 899. This paper concerns computation by the true motions of sun and moon, and it is practically certain that prior, at least, to the latter date all calculations for almanacs in India were made by mean planetary motions.

TABLE

General Table for calculation

Conforming to Table I "Indian Calendar,"

Entries in italics in Column 7 shew where, in the Northern system, saṁvatsara-

* = *Leap-years of 366 days.*

Concurrent year.								Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D. *	Jovian Saṁvatsara. Southern system.	Jovian Saṁvatsara. Northern system.	
1	2	3	3a	4	5	6	7	8
4001	822	957	306	74-75	899-900	53 Siddhārthin .	53 Siddhārthin .	...
4002	823	958	307	75-76	*900-01	54 Raudra .	54 Raudra .	...
4003	824	959	308	76-77	901-02	55 Durmati .	55 Durmati .	2 Vaiśākha .
4004	825	960	309	77-78	902-03	56 Dundubhi .	56 Dundubhi .	...
4005	826	961	310	78-79	903-04	57 Rudhirōdgārin	57 Rudhirōdgārin	6 Bhādrapada
4006	827	962	311	79-80	*904-05	58 Raktāksha .	58 Raktāksha .	...
4007	828	963	312	80-81	905-06	59 Krōdhana .	59 Krōdhana† .	...
4008	829	964	313	81-82	906-07	60 Kshaya .	1 *Prabhava* .	5 Śrāvaṇa .
4009	830	965	314	82-83	907-08	1 Prabhava .	2 *Vibhava* .	...
4010	831	966	315	83-84	*908-09	2 Vibhava .	3 *Śukla* . .	...
4011	832	967	316	84-85	909-10	3 Śukla . .	4 Pramōda .	3 Jyēshṭha .
4012	833	968	317	85-86	910-11	4 Pramōda .	5 Prajāpati .	...
4013	834	969	318	86-87	911-12	5 Prajāpati .	6 Āṅgirasa	7 Āśvina / 10 *Pausha* (*ksh*)
4014	835	970	319	87-88	*912-13	6 Āṅgirasa .	7 Śrīmukha .	1 Chaitra .
4015	836	971	320	88-89	913-14	7 Śrīmukha .	8 Bhāva . .	...
4016	837	972	321	89-90	914-15	8 Bhāva . .	9 Yuvan . .	5 Śrāvaṇa .
4017	838	973	322	90-91	915-16	9 Yuvan . .	10 Dhātṛi . .	...
4018	839	974	323	91-92	*916-17	10 Dhātṛi . .	11 Īśvara . .	...
4019	840	975	324	92-93	917-18	11 Īśvara . .	12 Bahudhānya .	4 Āshāḍha .
4020	841	976	325	93-94	918-19	12 Bahudhānya .	13 Pramāthin .	...
4021	842	977	326	94-95	919-20	13 Pramāthin .	14 Vikrama .	...

† 60 Kshaya was suppressed in the north.

LXI.

BY THE FIRST ĀRYA-SIDDHĀNTA.

the columns being similarly numbered.

names of solar years differ from those given by followers of the Sūrya-Siddhānta.

Cols. 13, 19.—Figures in brackets=number of civil days measured from January 1st.

COMMENCEMENT OF THE									
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
22 Mar. (81)	5 Thur.	13 47 30	16 Mar. (75)	6 Fri. .	9939·8668	196·5305	259·4537	4001
21 Mar. (81)	6 Fri. .	20 0 0	4 Mar. (64)	3 Tues.	9815·5502	43·7653	228·6299	4002
22 Mar. (81)	1 Sun. .	2 12 30	22 Feb. (53)	1 Sun. .	29·8654	927·2917	200·5438	4003
22 Mar. (81)	2 Mon. .	8 25 0	13 Mar. (72)	0 Sat. .	64·5051	863·2752	251·8535	4004
22 Mar. (81)	3 Tues.	14 37 30	3 Mar. (62)	5 Thur.	278·8203	746·8017	223·7674	4005
21 Mar. (81)	4 Wed.	20 50 0	20 Mar. (80)	3 Tues.	9974·8281	646·4936	272·3393	4006
22 Mar. (81)	6 Fri. .	3 2 30	10 Mar. (69)	1 Sun. .	189·1433	530·0200	244·2533	4007
22 Mar. (81)	0 Sat. .	9 15 0	27 Feb. (58)	5 Thur.	64 8268	377·2548	213·4295	4008
22 Mar. (81)	1 Sun. .	15 27 30	17 Mar. (76)	3 Tues.	9760·8345	276·9467	262·0014	4009
21 Mar. (81)	2 Mon. .	21 40 0	6 Mar. (66)	1 Sun. .	9975·1497	160·4731	233·9153	4010
22 Mar. (81)	4 Wed.	3 52 30	23 Feb. (54)	5 Thur.	9850·8331	7·7079	203·0914	4011
22 Mar. (81)	5 Thur.	10 5 0	14 Mar. (73)	4 Wed.	9885·4728	943·6915	254·4011	4012
22 Mar. (81)	6 Fri. .	16 17 30	4 Mar. (63)	2 Mon. .	99·7880	827·2178	226·3151	4013
21 Mar. (81)	0 Sat. .	22 30 0	22 Feb. (53)	0 Sat. .	314·1033	710·7443	198·2290	4014
22 Mar. (81)	2 Mon. .	4 42 30	11 Mar. (70)	5 Thur.	10·1109	610·4369	246·8010	4015
22 Mar. (81)	3 Tues.	10 55 0	28 Feb. (59)	2 Mon. .	9885·7943	457·6710	215·9771	4016
22 Mar. (81)	4 Wed.	17 7 30	19 Mar. (78)	1 Sun. .	9920·4340	393·6545	267·2868	4017
21 Mar. (81)	5 Thur.	23 20 0	7 Mar. (67)	5 Thur.	9796·1174	240·8893	236·4269	4018
22 Mar. (81)	0 Sat. .	5 32 30	25 Feb. (56)	3 Tues.	10·4326	124·4158	208·3769	4019
22 Mar. (81)	1 Sun. .	11 45 0	16 Mar. (75)	2 Mon. .	45·0722	60·3992	259·6866	4020
22 Mar. (81)	2 Mon. .	17 57 30	5 Mar. (64)	6 Fri. .	9920·7556	907·6340	228·5628	4021

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Saṁvatsara		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4022	843	978	327	95-96	*920-21	14 Vikrama .	15 Vṛisha . .	2 Vaiśākha
4023	844	979	328	96-97	921-22	15 Vṛisha . .	16 Chitrabhānu .	...
4024	845	980	329	97-98	922-23	16 Chitrabhānu .	17 Subhānu . .	6 Bhādrapada
4025	846	981	330	98-99	923-24	17 Subhānu .	18 Tāraṇa . .	...
4026	847	982	331	99-100	*924-25	18 Tāraṇa . .	19 Pārthiva .	...
4027	848	983	332	100-01	925-26	19 Pārthiva .	20 Vyaya . .	4 Āshāḍha
4028	849	984	333	101-02	926-27	20 Vyaya . .	21 Sarvajit. .	...
4029	850	985	334	102-03	927-28	21 Sarvajit. .	22 Sarvadhārin .	...
4030	851	986	335	103-04	*928-29	22 Sarvadhārin .	23 Virōdhin .	3 Jyēshṭha .
4031	852	987	336	104-05	929-30	23 Virōdhin .	24 Vikṛita . .	...
4032	853	988	337	105-06	930-31	24 Vikṛita . .	25 Khara . .	7 Āśvina .
4033	854	989	338	106-07	931-32	25 Khara . .	26 Nandana .	...
4034	855	990	339	107-08	*932-33	26 Nandana .	27 Vijaya . .	...
4035	856	991	340	108-09	933 34	27 Vijaya . .	28 Jaya . .	5 Śrāvana .
4036	857	992	341	109-10	934-35	28 Jaya . .	29 Manmatha .	...
4037	858	993	342	110-11	935-36	29 Manmatha .	30 Durmukha .	...
4038	859	994	343	111-12	*936-37	30 Durmukha .	31 Hēmalamba .	3 Jyēshṭha .
4039	860	995	344	112-13	937-38	31 Hēmalamba .	32 Vilamba .	...
4040	861	996	345	113-14	938-39	32 Vilamba .	33 Vikārin . .	...
4041	862	997	346	114-15	939-40	33 Vikārin . .	34 Śārvarin .	2 Vaiśākha .
4042	863	998	347	115-16	*940-41	34 Śārvarin .	35 Plava . .	...
4043	864	999	348	116-17	941-42	35 Plava . .	36 Śubhakṛit .	6 Bhādrapada
4044	865	1000	349	117-18	942-43	36 Śubhakṛit .	37 Śōbhana .	...
4045	866	1001	350	118-19	943-44	37 Śōbhana .	38 Krōdhin .	...
4046	867	1002	351	119-20	*944-45	38 Krōdhin .	39 Viśvāvasu .	4 Āshādha .

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
22 Mar. (82)	4 Wed.	0 10 0	23 Feb. (54)	4 Wed.	135·0709	791·1625	200·7767	4022
22 Mar. (81)	5 Thur.	6 22 30	13 Mar. (72)	3 Tues.	169·7105	727·1460	252·0864	4023
22 Mar. (81)	6 Fri. .	12 35 0	2 Mar. (61)	0 Sat. .	45·3939	574·3808	221·2635	2024
22 Mar. (81)	0 Sat. .	18 47 30	21 Mar. (80)	6 Fri. .	80·0335	510·3623	272·5722	4025
22 Mar. (82)	2 Mon. .	1 0 0	9 Mar. (69)	3 Tues.	9955·7169	357·5972	241·7524	4026
22 Mar. (81)	3 Tues.	7 12 30	26 Feb. (57)	0 Sat. .	9831·4003	204 8339	210·9246	4027
22 Mar. (81)	4 Wed.	13 25 0	17 Mar. (76)	6 Fri. .	9866·0399	140·8154	262·2323	4028
22 Mar. (81)	5 Thur.	19 37 30	7 Mar. (66)	4 Wed.	80 3551	24·3419	234·1482	4029
22 Mar. (82)	0 Sat. .	1 50 0	24 Feb. (55)	1 Sun. .	9956·0385	871·5766	203·3243	4030
22 Mar. (81)	1 Sun. .	8 2 30	14 Mar. (73)	0 Sat. .	9990·6782	807·5702	254·6340	4031
22 Mar. (81)	2 Mon. .	14 15 0	4 Mar. (63)	5 Thur.	204·9934	691·0866	226·5480	4032
22 Mar. (81)	3 Tues.	20 27 30	23 Mar. (82)	4 Wed.	239·6331	627·0701	277·8577	4033
22 Mar. (82)	5 Thur.	2 40 0	11 Mar. (71)	1 Sun. .	115·3164	474·3049	247·0339	4034
22 Mar. (81)	6 Fri. .	8 52 30	28 Feb. (59)	5 Thur.	9990·9998	321·5397	216·2100	4035
22 Mar. (81)	0 Sat. .	15 5 0	19 Mar. (78)	4 Wed.	25·6394	257·8149	270·2575	4036
22 Mar. (81)	1 Sun. .	21 17 30	8 Mar. (67)	1 Sun. .	9901·3228	104·7580	236·6958	4037
22 Mar. (82)	3 Tues.	3 30 0	26 Feb. (57)	6 Fri. .	115·6381	988·2845	208·6098	4038
22 Mar. (81)	4 Wed.	9 42 30	16 Mar. (75)	5 Thur.	150·2777	924·2680	259 9195	4039
22 Mar. (81)	5 Thur.	15 55 0	5 Mar. (64)	2 Mon. .	25·9611	771·5027	229·0957	4040
22 Mar. (81)	6 Fri. .	22 7 30	23 Feb. (54)	0 Sat. .	240·2763	655·0292	201·0096	4041
22 Mar. (82)	1 Sun. .	4 20 0	12 Mar. (72)	5 Thur.	9936·2841	554·7211	249·5816	4042
22 Mar. (81)	2 Mon. .	10 32 30	1 Mar. (60)	2 Mon. .	9811·9675	401·9560	218·7576	4043
22 Mar. (81)	3 Tues.	16 45 0	20 Mar. (79)	1 Sun. .	9846·6072	337·9394	270·0674	4044
22 Mar. (81)	4 Wed.	22 57 30	9 Mar. (68)	5 Thur.	9722·3005	185·1742	239·9517	4045
22 Mar. (82)	6 Fri. .	5 10 0	27 Feb. (58)	3 Tues.	9936·6057	68·7007	211·1575	4046

TABLE

CONCURRENT YEAR.								
Kali.	Śaka	Chaitrādi Vikrama.	Mēshādi solar year in Bengal	Kollam.	A.D.	JOVIAN SAṂVATSARA. Southern system.	JOVIAN SAṂVATSARA. Northern system.	INTERCALATED (*adhika*) and SUPPRESSED (*kshaya*) LUNAR MONTHS (true).
1	2	3	3*a*	4	5	6	7	8
4047	868	1003	352	120-21	945-46	39 Viśvāvasu .	40 Parābhava .	...
4048	869	1004	353	121 22	946 47	40 Parābhava .	41 Plavanga .	...
4049	870	1005	354	122 23	947 48	41 Plavanga .	42 Kīlaka . .	3 Jyēshṭha .
4050	871	1006	355	123-24	*948 49	42 Kīlaka . .	43 Saumya .	...
4051	872	1007	356	124-25	949 50	43 Saumya .	44 Sādhārana .	7 Āśvina .
4052	873	1008	357	125 26	950 51	44 Sādhāraṇa .	45 Virōdhakṛt .	...
4053	874	1009	358	126 27	951 52	45 Virōdhakṛt .	46 Paridhāvin .	...
4054	875	1010	359	127-28	*952 53	46 Paridhāvin .	47 Pramādin .	5 Śrāvaṇa .
4055	876	1011	360	128 29	953-54	47 Pramādin .	48 Ānanda .	...
4056	877	1012	361	129 30	954 55	48 Ānanda .	49 Rākshasa .	...
4057	878	1013	362	130-31	955-56	49 Rākshasa .	50 Anala . .	3 Jyēshṭha .
4058	879	1014	363	131 32	*956 57	50 Anala . .	51 Piṅgala .	...
4059	880	1015	364	132-33	957-58	51 Piṅgala .	52 Kālayukta .	...
4060	881	1016	365	133-34	958 59	52 Kālayukta .	53 Siddhārthin .	2 Vaiśākha .
4061	882	1017	366	134 35	959 60	53 Siddhārthin .	54 Raudra .	...
4062	883	1018	367	135 36	*960 61	54 Raudra .	55 Durmati .	6 Bhādrapada
4063	884	1019	368	136 37	961-62	55 Durmati .	56 Dundubhi .	...
4064	885	1020	369	137-38	962-63	56 Dundubhi .	57 Rudhirōdgārin	...
4065	886	1021	370	138-39	963-64	57 Rudhirōdgārin	58 Raktākṣha .	4 Āshāḍha .
4066	887	1022	371	139 40	*964-65	58 Raktākṣha .	59 Krōdhana .	...
4067	888	1023	372	140 41	965 66	59 Krōdhana .	60 Kshaya .	...
4068	889	1024	373	141-42	966-67	60 Kshaya .	1 Prabhava .	3 Jyēshṭha .
4069	890	1025	374	142-43	967-68	1 Prabhava .	2 Vibhava .	...
4070	891	1026	375	143-44	*968-69	2 Vibhava .	3 Śukla . .	7 Āśvina .
4071	892	1027	376	144-45	969-70	3 Śukla . .	4 Pramōda .	...

LXI—*Contd.*

COMMENCEMENT OF THE									Kali.
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).						
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*		
13	14	17	19	20	23	24	25		1
		H. M. S.							
22 Mar. (81)	0 Sat. .	11 22 30	17 Mar. (76)	2 Mon. .	9972·2453	4·6841	262·4672		4047
22 Mar. (81)	1 Sun. .	17 35 0	7 Mar. (66)	0 Sat. .	185·5605	888·2106	234·3811		4048
22 Mar. (81)	2 Mon. .	23 47 30	24 Feb. (55)	4 Wed.	61·2440	735·4454	203·5584		4049
22 Mar. (82)	4 Wed.	6 0 0	14 Mar. (74)	3 Tues.	95·8836	671·4290	254·8669		4050
22 Mar. (81)	5 Thur.	12 12 30	3 Mar. (62)	0 Sat. .	9971·5669	518·6637	224·0431		4051
22 Mar. (81)	6 Fri. .	18 25 0	22 Mar. (81)	6 Fri. .	6·2066	454·6473	275·3528		4052
23 Mar. (82)	1 Sun. .	0 37 30	11 Mar. (70)	3 Tues.	9881·8899	301·8921	244·5290		4053
22 Mar. (82)	2 Mon. .	6 50 0	28 Feb. (59)	0 Sat. .	9757·5734	149·1168	213·7052		4054
22 Mar. (81)	3 Tues.	13 2 30	18 Mar. (77)	6 Fri. .	9792·2130	85·1004	265·0148		4055
22 Mar. (81)	4 Wed.	19 15 0	8 Mar. (67)	4 Wed.	6·5282	968·6268	236·9287		4056
23 Mar. (82)	6 Fri. .	1 27 30	26 Feb. (57)	2 Mon. .	220·8435	852·1532	208·8427		4057
22 Mar. (82)	0 Sat. .	7 40 0	16 Mar. (76)	1 Sun. .	255·4831	788·1367	260·1524		4058
22 Mar. (81)	1 Sun. .	13 52 30	5 Mar. (64)	5 Thur.	131·1665	635·3715	229·3286		4059
22 Mar. (81)	2 Mon. .	20 5 0	22 Feb. (53)	2 Mon. .	6·8499	482·6064	198·5047		4060
23 Mar. (82)	4 Wed.	2 17 30	13 Mar. (72)	1 Sun. .	41·4895	418·5898	249·8145		4061
22 Mar. (82)	5 Thur.	8 30 0	1 Mar. (61)	5 Thur.	9917·1729	265·8247	218·9905		4062
22 Mar. (81)	6 Fri. .	14 42 30	20 Mar. (79)	4 Wed.	9951·8125	201·8082	270·3003		4063
22 Mar. (81)	0 Sat. .	20 55 0	9 Mar. (68)	1 Sun. .	9827·4959	49·0429	239·4764		4064
23 Mar. (82)	2 Mon. .	3 7 30	27 Feb. (58)	6 Fri. .	41·8112	932·5694	211·3904		4065
22 Mar. (82)	3 Tues.	9 20 0	17 Mar. (77)	5 Thur.	75·4508	868·5529	262·7001		4066
22 Mar. (81)	4 Wed.	15 32 30	7 Mar. (66)	3 Tues.	290·7660	752·0794	234·6440		4067
22 Mar (81)	5 Thur.	21 45 0	24 Feb. (55)	0 Sat. .	166·4494	599·3141	203 7901		4068
23 Mar. (82)	0 Sat. .	3 57 30	15 Mar. (74)	6 Fri. .	201·0890	535·2977	255·0998		4069
22 Mar. (82)	1 Sun. .	10 10 0	3 Mar. (63)	3 Tues.	76·7724	382·5385	224·2760		4070
22 Mar. (81)	2 Mon. .	16 22 30	21 Mar. (80)	1 Sun. .	9772·7802	282·2243	272·8479		4071

TABLE

CONCURRENT YEAR.								
						JOVIAN SAṂVATSARA		INTERCALATED (*adhika*) and SUPPRESSED (*kshaya*) LUNAR MONTHS (true).
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4072	893	1028	377	145-46	970-71	4 Pramōda .	5 Prajāpati .	...
4073	894	1029	378	146-47	971-72	5 Prajāpati .	6 Āṅgirasa .	5 Śrāvaṇa .
4074	895	1030	379	147-48	*972-73	6 Āngirasa .	7 Śrīmukha .	...
4075	896	1031	380	148-49	973-74	7 Śrīmukha .	8 Bhāva . .	...
4076	897	1032	381	149-50	974-75	8 Bhāva . .	9 Yuvan . .	4 Āshāḍha .
4077	898	1033	382	150-51	975-76	9 Yuvan . .	10 Dhātṛi . .	...
4078	899	1034	383	151-52	*976-77	10 Dhātṛi . .	11 Iśvara . .	...
4079	900	1035	384	152-53	977-78	11 Iśvara . .	12 Bahudhānya .	1 Chaitra .
4080	901	1036	385	153 54	978-79	12 Bahudhānya .	13 Pramāthin .	... ,
4081	902	1037	386	154-55	979-80	13 Pramāthin .	14 Vikrama .	6 Bhādrapada
4082	903	1038	387	155-56	*980-81	14 Vikrama .	15 Vṛisha . .	...
4083	904	1039	388	156-57	981-82	15 Vṛisha . .	16 Chitrabhānu .	...
4084	905	1040	389	157-58	982-83	16 Chitrabhānu .	17 Subhānu .	4 Āshādha .
4085	906	1041	390	158-59	983 84	17 Subhānu .	18 Tāraṇa .	...
4086	907	1042	391	159-60	*984-85	18 Tāraṇa . .	19 Pārthiva .	...
4087	908	1043	392	160-61	985-86	19 Pārthiva .	20 Vyaya . .	3 Jyēshṭha .
4088	909	1044	393	161-62	986-87	20 Vyaya . .	21 Sarvajit .	...
4089	910	1045	394	162-63	987-88	21 Sarvajit. .	22 Sarvadhārin .	7 Āśvina .
4090	911	1046	395	163-64	*988-89	22 Sarvadhārin .	23 Virōdhin .	...
4091	912	1047	396	164-65	989-90	23 Virōdhin .	24 Vikṛita .	...
4092	913	1048	397	165-66	990-91	24 Vikṛita . .	25 Khara† .	5 Śrāvaṇa .
4093	914	1049	398	166-67	991-92	25 Khara . .	27 *Vijaya* . .	...
4094	915	1050	399	167-68	*992-93	26 Nandana .	28 *Jaya* . .	...
4095	916	1051	400	168-69	993-94	27 Vijaya . .	29 *Manmatha* .	3 Jyēshṭha .
4096	917	1052	401	169-70	994-95	28 Jaya . .	30 *Durmukha* .	...

† 26 Nandana was suppressed in the north.

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
22 Mar. (81)	3 Tues	22 35 0	11 Mar. (70)	6 Fri. .	9987·0954	165·7508	244·7619	4072
23 Mar. (82)	5 Thur.	4 47 30	28 Feb. (59)	3 Tues.	9862·7789	12·9856	213·9381	4073
22 Mar. (82)	6 Fri. .	11 0 0	18 Mar. (78)	2 Mon. .	9897·4185	948·9692	265·2477	4074
22 Mar. (81)	0 Sat. .	17 12 30	8 Mar. (67)	0 Sat. .	111·7337	832·4955	237·1616	4075
22 Mar. (81)	1 Sun. .	23 25 0	25 Feb. (56)	4 Wed.	9987·4171	679·7304	206·3378	4076
23 Mar. (82)	3 Tues.	5 37 30	16 Mar. (75)	3 Tues.	22·0566	615·7139	257·6475	4077
22 Mar. (82)	4 Wed.	11 50 0	4 Mar. (64)	0 Sat. .	9897·7400	462·9486	226·8237	4078
22 Mar. (81)	5 Thur.	18 2 30	21 Feb. (52)	4 Wed.	9773·4234	310·1835	195·9998	4079
23 Mar. (82)	0 Sat. .	0 15 0	12 Mar. (71)	3 Tues.	9808·0631	246·1670	247·3096	4080
23 Mar. (82)	1 Sun. .	6 27 30	2 Mar. (61)	1 Sun. .	22·3783	129·6934	219·2234	4081
22 Mar. (82)	2 Mon. .	12 40 0	20 Mar. (80)	0 Sat. .	57·0179	65·6869	270·5332	4082
22 Mar. (81)	3 Tues.	18 52 30	9 Mar. (68)	4 Wed.	9932·7013	912·9117	239·7093	4083
23 Mar. (82)	5 Th r.	1 5 0	27 Feb. (58)	2 Mon. .	147·0166	796·4381	211·6233	4084
23 Mar. (82)	6 Fri. .	7 17 30	18 Mar. (77)	1 Sun. .	181·6562	732·4216	262·9330	4085
22 Mar. (82)	0 Sat. .	13 30 0	6 Mar. (66)	5 Thur.	57·3396	579·6565	232·1091	4086
22 Mar. (81)	1 Sun. .	19 42 30	23 Feb. (54)	2 Mon. .	9933·0220	426·8913	201·2852	4087
23 Mar. (82)	3 Tues.	1 55 0	14 Mar. (73)	1 Sun. .	9967·6626	362·8648	252·5949	4088
23 Mar. (82)	4 Wed.	8 7 30	3 Mar. (62)	5 Thur.	9843·3460	210·1096	221·7711	4089
22 Mar. (82)	5 Thur.	14 20 0	21 Mar. (81)	4 Wed.	9877·9856	146·0931	273·0808	4090
22 Mar. (81)	6 Fri. .	20 32 30	11 Mar. (70)	2 Mon. .	92·3008	29·6195	244·9948	4091
23 Mar. (82)	1 Sun. .	2 45 0	28 Feb. (59)	6 Fri. .	9967·9842	876·8543	214·1709	4092
23 Mar. (82)	2 Mon. .	8 57 30	19 Mar. (78)	5 Thur.	3·6239	812·8379	265·4806	4093
22 Mar. (82)	3 Tues.	15 10 0	8 Mar. (68)	3 Tues.	216·9391	696·3643	237·3945	4094
22 Mar. (81)	4 Wed.	21 22 30	25 Feb. (56)	0 Sat. .	92·6225	543·5991	206·5707	4095
23 Mar. (82)	6 Fri. .	3 35 0	16 Mar. (76)	6 Fri. .	127·2621	479·5826	257·8804	4096

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Samvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true)
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4097	918	1053	402	170-71	995-96	29 Manmatha .	31 Hēmalamba .	... .
4098	919	1054	403	171-72	*996-97	30 Durmukha .	32 Vilamba .	1 Chaitra .
4099	920	1055	404	172-73	997-98	31 Hēmalamba .	33 Vikārin . .	...
4100	921	1056	405	173-74	998-99	32 Vilamba .	34 Śārvarin .	5 Śrāvaṇa .
4101	922	1057	406	174-75	999-1000	33 Vikārin . .	35 Plava . .	...
4102	923	1058	407	175-76	*1000-01	34 Śārvarin .	36 Śubhakṛit .	...
4103	924	1059	408	176-77	1001-02	35 Plava . .	37 Śōbhana .	4 Āshāḍha .
4104	925	1060	409	177-78	1002-03	36 Śubhakrit .	38 Krōdhin .	...
4105	926	1061	410	178-79	1003-04	37 Śōbhana .	39 Viśvāvasu .	...
4106	927	1062	411	179-80	*1004-05	38 Krōdhin .	40 Parābhava .	2 Vaiśākha .
4107	928	1063	412	180-81	1005-06	39 Viśvāvasu .	41 Plavaṅga .	...
4108	929	1064	413	181-82	1006-07	40 Parābhava .	42 Kīlaka . .	6 Bhādrapada
4109	930	1065	414	182-83	1007-08	41 Plavaṅga .	43 Saumya .	...
4110	931	1066	415	183-84	*1008-09	42 Kīlaka . .	44 Sādhāraṇa .	...
4111	932	1067	416	184-85	1009-10	43 Saumya .	45 Virōdhakṛit .	5 Śrāvaṇa .
4112	933	1068	417	185-86	1010-11	44 Sādhāraṇa .	46 Paridhāvin .	...
4113	934	1069	418	186-87	1011-12	45 Virōdhakṛit .	47 Pramādin .	...
4114	935	1070	419	187-88	*1012-13	46 Paridhāvin .	48 Ānanda .	3 Jyēshṭha. .
4115	936	1071	420	188-89	1013-14	47 Pramādin .	49 Rākshasa .	...
4116	937	1072	421	189-90	1014-15	48 Ānanda .	50 Anala . .	...
4117	938	1073	422	190-91	1015-16	49 Rākshasa .	51 Piṅgala .	1 Chaitra .
4118	939	1074	423	191-92	*1016-17	50 Anala . .	52 Kālayukta .	...
4119	940	1075	424	192-93	1017-18	51 Piṅgala .	53 Siddhārthin .	5 Śrāvaṇa .
4120	941	1076	425	193-94	1018-19	52 Kālayukta .	54 Raudra .	...
4121	942	1077	426	194-95	1019-20	53 Siddhārthin .	55 Durmati .	...

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
23 Mar. (82)	0 Sat. .	9 47 30	5 Mar. (64)	3 Tues.	2·9455	326·8174	227·0566	4097
22 Mar. (82)	1 Sun. .	16 0 0	22 Feb. (53)	0 Sat. .	9878·6289	174·0522	196·2327	4098
22 Mar. (81)	2 Mon. .	22 12 30	12 Mar. (71)	6 Fri. .	9913·2685	110·0357	247·5424	4099
23 Mar. (82)	4 Wed.	4 25 0	2 Mar. (61)	4 Wed.	127·5838	993·5622	219·4563	4100
23 Mar. (82)	5 Thur.	10 37 30	21 Mar. (80)	3 Tues.	162·2234	929·5456	270·7661	4101
22 Mar. (82)	6 Fri. .	16 50 0	9 Mar. (69)	0 Sat. .	37·9068	776·7804	239·9422	4102
22 Mar. (81)	0 Sat. .	23 2 30	27 Feb. (58)	5 Thur.	252·2221	660 3068	211·8862	4103
23 Mar. (82)	2 Mon. .	5 15 0	17 Mar. (76)	3 Tues.	9948·2298	559·9987	260·4280	4104
23 Mar. (82)	3 Tues.	11 27 30	6 Mar. (65)	0 Sat. .	9823·9122	407·2335	229·6042	4105
22 Mar. (82)	4 Wed.	17 40 0	24 Feb. (55)	5 Thur.	38·2274	290·7599	201·5181	4106
22 Mar. (81)	5 Thur.	23 52 30	13 Mar. (72)	3 Tues.	9734·2362	190·4518	250·0901	4107
23 Mar (82)	0 Sat. .	6 5 0	3 Mar. (62)	1 Sun. .	9948·5515	73·9783	222·0040	4108
23 Mar. (82)	1 Sun. .	12 17 30	22 Mar. (81)	0 Sat. .	9983·1911	9·9618	274·3137	4109
22 Mar. (82)	2 Mon. ..	18 30 0	11 Mar. (71)	5 Thur.	197·5063	893·4882	245·2277	4110
23 Mar. (82)	4 Wed.	0 42 30	28 Feb. (59)	2 Mon. .	73·1897	740·7230	214·4037	4111
23 Mar. (82)	5 Thur. .	6 55 0	19 Mar. (78)	1 Sun. .	107·8294	676·7066	265·7135	4112
23 Mar. (82)	6 Fri. .	13 7 30	8 Mar. (67)	5 Thur.	9983·5127	523·9413	234·8896	4113
22 Mar. (82)	0 Sat. .	19 20 0	25 Feb. (56)	2 Mon. .	9859·1961	371·1761	204·0658	4114
23 Mar. (82)	2 Mon. .	1 32 30	15 Mar. (74)	1 Sun. .	9893·8357	307·4513	258·1133	4115
23 Mar. (82)	3 Tues.	7 45 0	4 Mar. (63)	5 Thur.	9769·5190	154·3945	224·5517	4116
23 Mar. (82)	4 Wed.	13 57 30	22 Feb. (53)	3 Tues.	9983·8344	37·9209	196·5655	4117
22 Mar. (82)	5 Thur. .	20 10 0	12 Mar. (72)	2 Mon. .	18·4746	973·9044	247·7753	4118
23 Mar. (82)	0 Sat. .	2 22 30	2 Mar. (61)	0 Sat. .	232·7892	857·4309	219·6892	4119
23 Mar. (82)	1 Sun. .	8 35 0	21 Mar. (80)	6 Fri. .	267·4288	793·4143	270·9990	4120
23 Mar. (82)	2 Mon. ..	14 47 30	10 Mar. (69)	3 Tues	143·1122	640·6491	240·1751	4121

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Saṁvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*.	4	5	6	7	8
4122	943	1078	427	195-96	*1020-21	54 Raudra .	56 Dundubhi .	4 Āshāḍha .
4123	944	1079	428	196-97	1021-22	55 Durmati .	57 Rudhirōdgāṛin	...
4124	945	1080	429	197-98	1022-23	56 Dundubhi .	58 Raktāksha .	...
4125	946	1081	430	198-99	1023-24	57 Rudhirōdgārin	59 Krōdhana .	2 Vaiśākha .
4126	947	1082	431	199-200	*1024-25	58 Raktāksha .	60 Kshaya .	...
4127	948	1083	432	200-01	1025-26	59 Krōdhana .	1 Prabhava .	6 Bhādrapada
4128	949	1084	433	201-02	1026-27	60 Kshaya .	2 Vibhava .	...
4129	950	1085	434	202-03	1027-28	1 Prabhava .	3 Śukla . .	...
4130	951	1086	435	203-04	*1028-29	2 Vibhava .	4 Pramōda .	5 Śrāvaṇa .
4131	952	1087	436	204-05	1029-30	3 Śukla . .	5 Prajāpati .	...
4132	953	1088	437	205-06	1030-31	4 Pramōda .	6 Āṅgirasa .	...
4133	954	1089	438	206-07	1031-32	5 Prajāpati .	7 Śrīmukha .	3 Jyēshṭha .
4134	955	1090	439	207-08	*1032-33	6 Āṅgirasa .	8 Bhāva . .	...
4135	956	1091	440	208-09	1033-34	7 Śrīmukha .	9 Yuvan . .	...
4136	957	1092	441	209-10	1034-35	8 Bhāva . .	10 Dhātṛi . .	1 Chaitra .
4137	958	1093	442	210-11	1035-36	9 Yuvan . .	11 Īśvara . .	...
4138	959	1094	443	211-12	*1036-37	10 Dhātṛi . .	12 Bahudhānya .	5 Śrāvaṇa .
4139	960	1095	444	212-13	1037-38	11 Īśvara . .	13 Pramāthin .	...
4140	961	1096	445	213-14	1038-39	12 Bahudhānya .	14 Vikrama .	...
4141	962	1097	446	214-15	1039-40	13 Pramāthin .	15 Vṛisha . .	4 Āshāḍha .
4142	963	1098	447	215-16	*1040-41	14 Vikrama . .	16 Chitrabhānu .	...
4143	964	1099	448	216-17	1041-42	15 Vṛisha . .	17 Subhānu .	...
4144	965	1100	449	217-18	1042-43	16 Chitrabhānu .	18 Tāraṇa .	2 Vaiśākha .
4145	966	1101	450	218-19	1043-44	17 Subhānu .	19 Pārthiva .	...
4146	967	1102	451	219-20	*1044-45	18 Tāraṇa . .	20 Vyaya . .	6 Bhādrapada

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-saṁkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
22 Mar. (82)	3 Tues.	21 0 0	27 Feb. (58)	0 Sat. .	18·6956	487·8840	209·3513	4122
23 Mar. (82)	5 Thur.	3 12 30	17 Mar. (76)	6 Fri. .	53·4352	423·8675	260·6609	4123
23 Mar. (82)	6 Fri. .	9 25 0	6 Mar. (65)	3 Tues.	9929·1186	271·1022	229·8371	4124
23 Mar. (82)	0 Sat. .	15 37 30	23 Feb. (54)	0 Sat. .	9804·8020	118·3371	199·0132	4125
22 Mar. (82)	1 Sun. .	21 50 0	13 Mar. (73)	6 Fri. .	9839·4416	54·3206	250·3230	4126
23 Mar. (82)	3 Tues.	4 2 30	3 Mar. (62)	4 Wed.	53·7569	937·8470	222·2369	4127
23 Mar. (82)	4 Wed.	10 15 0	22 Mar. (81)	3 Tues.	88·3965	873·8305	273·5466	4128
23 Mar. (82)	5 Thur.	16 27 30	12 Mar. (71)	1 Sun. .	302·7117	757·3570	245·4606	4129
22 Mar. (82)	6 Fri. .	22 40 0	29 Feb. (60)	5 Thur	178·3951	604·5917	214·6366	4130
23 Mar. (82)	1 Sun. .	4 52 30	18 Mar. (77)	3 Tues.	9874·4029	504·2837	263·2086	4131
23 Mar. (82)	2 Mon. .	11 5 0	7 Mar. (66)	0 Sat. .	9750·0862	351·5185	232·3847	4132
23 Mar. (82)	3 Tues.	17 17 30	25 Feb. (56)	5 Thur.	9964·4015	235·0448	204·2987	4133
22 Mar. (82)	4 Wed.	23 30 0	15 Mar. (75)	4 Wed.	9999·0411	171·0284	255·6084	4134
23 Mar. (82)	6 Fri. .	5 42 30	4 Mar. (63)	1 Sun. .	9874·7245	18·2632	224·7846	4135
23 Mar. (82)	0 Sat. .	11 55 0	22 Feb. (53)	6 Fri. .	89·0398	901·7897	196·6984	4136
23 Mar. (82)	1 Sun. .	18 7 30	13 Mar. (72)	5 Thur.	123·6794	837·7731	248·0082	4137
23 Mar. (83)	3 Tues.	0 20 0	1 Mar. (61)	2 Mon. .	9999·3628	685·0080	217·1843	4138
23 Mar. (82)	4 Wed.	6 32 30	20 Mar. (79)	1 Sun. .	34·0024	620·9915	268·4941	4139
23 Mar. (82)	5 Thur.	12 45 0	9 Mar. (68)	5 Thur.	9909·6858	468·2262	237·6702	4140
23 Mar. (82)	6 Fri. .	18 57 30	26 Feb. (67)	2 Mon. .	9785·3692	315·4611	206·8464	4141
23 Mar. (83)	1 Sun.	1 10 0	16 Mar. (76)	1 Sun. .	9820·0088	251·4446	258·1561	4142
23 Mar. (82)	2 Mon. .	7 22 30	6 Mar. (65)	6 Fri. .	34·3241	134·9710	230·0700	4143
23 Mar. (82)	3 Tues.	13 35 0	23 Feb. (54)	3 Tues.	9910·0075	982·2058	199·2461	4144
23 Mar. (82)	4 Wed.	19 47 30	14 Mar. (73)	2 Mon. .	9944·6471	918·1693	250·5559	4145
23 Mar. (83)	6 Fri. .	2 0 0	3 Mar. (63)	0 Sat. .	158·9623	801·7158	222·4698	4146

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Saṁvatsara.		Intercalated (*adhika*) and suppressed (*kshaya* Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4147	968	1103	452	220-21	1045-46	19 Pārthiva .	21 Sarvajit .	...
4148	969	1104	453	221-22	1046-47	20 Vyaya . .	22 Sarvadhārin .	...
4149	970	1105	454	222-23	1047-48	21 Sarvajit .	23 Virōdhin . .	5 Śrāvaṇa .
4150	971	1106	455	223-24	*1048-49	22 Sarvadhārin .	24 Vikṛita . .	...
4151	972	1107	456	224-25	1049-50	23 Virōdhin . .	25 Khara . .	...
4152	973	1108	457	225-26	1050-51	24 Vikṛita . .	26 Nandana .	3 Jyēshṭha .
4153	974	1109	458	226-27	1051-52	25 Khara . .	27 Vijaya . .	...
4154	975	1110	459	227-28	*1052-53	26 Nandana .	28 Jaya .	7 Āśvina 10 *Pausha* (*ksh*)
4155	976	1111	460	228-29	1053-54	27 Vijaya . .	29 Manmatha .	1 Chaitra .
4156	977	1112	461	229-30	1054-55	28 Jaya . .	30 Durmukha .	...
4157	978	1113	462	230-31	1055-56	29 Manmatha .	31 Hēmalamba .	5 Śrāvaṇa .
4158	979	1114	463	231-32	*1056-57	30 Durmukha .	32 Vilamba .	...
4159	980	1115	464	232-33	1057-58	31 Hēmalamba .	33 Vikārin . .	...
4160	981	1116	465	233-34	1058-59	32 Vilamba .	34 Śārvarin .	4 Āshāḍha .
4161	982	1117	466	234-35	1059-60	33 Vikārin .	35 Plava . .	...
4162	983	1118	467	235-36	*1060-61	34 Śārvarin .	36 Śubhakṛit .	...
4163	984	1119	468	236-37	1061-62	35 Plava . .	37 Śōbhana .	2 Vaiśākha .
4164	985	1120	469	237-38	1062-63	36 Śubhakṛit .	38 Krōdhin .	...
4165	986	1121	470	238-39	1063-64	37 Śōbhana .	39 Viśvāvasu .	6 Bhādrapada
4166	987	1122	471	239-40	*1064-65	38 Krōdhin .	40 Parābhava .	...
4167	988	1123	472	240-41	1065-66	39 Viśvāvasu .	41 Plavaṅga .	...
4168	989	1124	473	241-42	1066-67	40 Parābhava .	42 Kīlaka . .	4 Āshādha .
4169	990	1125	474	242-43	1067-68	41 Plavaṅga .	43 Saumya .	...
4170	991	1126	475	243-44	*1068-69	42 Kīlaka . .	44 Sādhāraṇa .	...
4171	992	1127	476	244-45	1069-70	43 Saumya .	45 Virōdhakṛit .	3 Jyēshṭha .

LXI—*Contd.*

COMMENCEMENT OF THE								Kali.
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					
Day and month, A.D.	Week-day.	Time of true Mēsha-saṁkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
23 Mar. (82)	0 Sat. .	8 12 30	22 Mar. (81)	6 Fri. .	193·6019	737·6992	273·7795	4147
23 Mar. (82)	1 Sun. .	14 25 0	11 Mar. (70)	3 Tues.	69·2353	584·9341	242·9557	4148
23 Mar. (82)	2 Mon. .	20 37 30	28 Feb. (59)	0 Sat. .	9944·9688	432·1689	212·1318	4149
23 Mar. (83)	4 Wed.	2 50 0	18 Mar. (78)	6 Fri. .	9979·6083	308·1524	263·4415	4150
23 Mar. (82)	5 Thur.	9 2 30	7 Mar. (66)	3 Tues.	9855·2917	215·3872	232·6177	4151
23 Mar. (82)	6 Fri. .	15 15 0	25 Feb. (56)	1 Sun. .	69·6069	98·9136	204·5316	4152
23 Mar. (82)	0 Sat. .	21 27 30	16 Mar. (75)	0 Sat. .	104·2465	94·8972	255·3413	4153
23 Mar. (83)	2 Mon. .	3 40 0	4 Mar. (64)	4 Wed.	9979·9299	882·1319	225·0175	4154
23 Mar. (82)	3 Tues.	9 52 30	22 Feb. (53)	2 Mon. .	194·2452	765 6584	196·9313	4155
23 Mar. (82)	4 Wed.	16 5 0	13 Mar. (72)	1 Sun. .	228·8848	701·6419	248·2411	4156
23 Mar. (82)	5 Thur.	22 17 30	2 Mar. (61)	5 Thur.	104·5682	548·8767	217·4172	4157
23 Mar. (83)	0 Sat. .	4 30 0	20 Mar. (80)	4 Wed.	139·2078	484·8602	268·7270	4158
23 Mar. (82)	1 Sun. .	10 42 30	9 Mar. (68)	1 Sun. .	14·8912	332·0950	237·9031	4159
23 Mar. (82)	2 Mon. .	16 55 0	26 Feb. (57)	5 Thur.	9890·5746	179·3299	207·0793	4160
23 Mar. (82)	3 Tues.	23 7 30	17 Mar. (76)	4 Wed.	9925·2142	115·3138	258·3890	4161
23 Mar. (83)	5 Thur.	5 20 0	6 Mar. (66)	2 Mon. .	139·5296	998·8397	230·3029	4162
23 Mar. (82)	6 Fri. .	11 32 30	23 Feb. (54)	6 Fri. .	15·2129	846·0746	199·4790	4163
23 Mar. (82)	0 Sat. .	17 45 0	14 Mar. (73)	5 Thur.	49·8525	782·0580	250·7888	4164
23 Mar. (82)	1 Sun. .	23 57 30	4 Mar. (63)	3 Tues.	264·1677	665·5845	222·7027	4165
23 Mar. (83)	3 Tues.	6 10 0	21 Mar. (81)	1 Sun. .	9960·1755	565·2764	271·2747	4166
23 Mar. (82)	4 Wed.	12 22 30	10 Mar. (69)	5 Thur.	9835·8589	412·5112	240·5508	4167
23 Mar. (83)	5 Thur.	18 35 0	28 Feb. (59)	3 Tues.	50·1742	296·0396	212·2647	4168
24 Mar. (83)	0 Sat. .	0 47 30	18 Mar. (77)	1 Sun. .	9746·1819	195·7275	260·9366	4169
23 Mar. (83)	1 Sun. .	7 0 0	7 Mar. (67)	6 Fri. .	9960·4972	79·2569	232·8506	4170
23 Mar. (82)	2 Mon. .	13 12 30	25 Feb. (56)	4 Wed.	174·8124	962·7823	204·7645	4171

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Saṁvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4172	993	1128	477	245-46	1070-71	44 Sādhāraṇa .	46 Paridhāvin .	...
4173	994	1129	478	246-47	1071-72	45 Virōdhakṛit .	47 Pramādin .	7 Āśvina .
4174	995	1130	479	247-48	*1072-73	46 Paridhāvin .	48 Ānanda .	...
4175	996	1131	480	248-49	1073-74	47 Pramādin .	49 Rākshasa .	...
4176	997	1132	481	249-50	1074-75	48 Ānanda .	50 Anala .	5 Śrāvaṇa .
4177	998	1133	482	250-51	1075-76	49 Rākshasa .	51 Piṅgala† .	...
4178	999	1134	483	251-52	*1076-77	50 Anala .	53 *Siddhārthin* .	...
4179	1000	1135	484	252-53	1077-78	51 Piṅgala .	54 *Raudra* .	3 Jyēshṭha .
4180	1001	1136	485	253-54	1078-79	52 Kālayukta .	55 *Durmati* .	...
4181	1002	1137	486	254-55	1079-80	53 Siddhārthin .	56 *Dundubhi* .	...
4182	1003	1138	487	255-56	*1080-81	54 Raudra .	57 Rudhirōdgārin	2 Vaiśākha .
4183	1004	1139	488	256-57	1081-82	55 Durmati .	58 Raktāksha .	...
4184	1005	1140	489	257-58	1082-83	56 Dundubhi .	59 Krōdhana .	6 Bhādrapada
4185	1006	1141	490	258-59	1083-84	57 Rudhirōdgārin	60 Kshaya .	...
4186	1007	1142	491	259-60	*1084-85	58 Raktāksha .	1 Prabhava .	...
4187	1008	1143	492	260-61	1085-86	59 Krōdhana .	2 Vibhava .	4 Āshāḍha .
4188	1009	1144	493	261-62	1086-87	60 Kshaya .	3 Śukla .	...
4189	1010	1145	494	262-63	1087-88	1 Prabhava .	4 Pramōda .	...
4190	1011	1146	495	263-64	*1088-89	2 Vibhava .	5 Prajāpati .	3 Jyēshṭha .
4191	1012	1147	496	264-65	1089-90	3 Śukla .	6 Āṅgirasa .	...
4192	1013	1148	497	265-66	1090-91	4 Pramōda .	7 Śrīmukha .	7 Āśvina .
4193	1014	1149	498	266-67	1091-92	5 Prajāpati .	8 Bhāva .	...
4194	1015	1150	499	267-68	*1092-93	6 Āṅgirasa .	9 Yuvan .	...
4195	1016	1151	500	268-69	1093-94	7 Śrīmukha .	10 Dhātṛi .	5 Śrāvaṇa .
4196	1017	1152	501	269-70	1094-95	8 Bhāva .	11 Īśvara .	...

† 52 Kālayukta was suppressed in the north.

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-saṁkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
23 Mar. (82)	3 Tues.	19 25 0	16 Mar. (75)	3 Tues.	209·4520	898·7659	256·0742	4172
24 Mar. (83)	5 Thur.	1 37 30	5 Mar. (64)	0 Sat. .	85·1354	746·0007	225·2504	4173
23 Mar. (83)	6 Fri. .	7 50 0	23 Mar. (83)	6 Fri. .	119·7751	681·9843	276·5600	4174
23 Mar. (82)	0 Sat. .	14 2 30	12 Mar. (71)	3 Tues.	9995·4584	529·2190	245·7362	4175
23 Mar. (82)	1 Sun. .	20 15 0	1 Mar. (60)	0 Sat. .	9871·1418	376·4538	214·9123	4176
24 Mar. (83)	3 Tues.	2 27 30	20 Mar. (79)	6 Fri. .	9905·7814	312·4374	266·2221	4177
23 Mar. (83)	4 Wed.	8 40 0	8 Mar. (68)	3 Tues.	9781·4647	159·6721	235·3982	4178
23 Mar. (82)	5 Thur.	14 52 30	26 Feb. (57)	1 Sun. .	9995·7800	43·1986	207·3122	4179
23 Mar. (82)	6 Fri. .	21 5 0	17 Mar. (76)	0 Sat. .	30·4197	979·1821	258·6219	4180
24 Mar. (83)	1 Sun. .	3 17 30	7 Mar. (66)	5 Thur.	244·7349	882·7084	230·5358	4181
23 Mar. (83)	2 Mon. .	9 30 0	24 Feb. (55)	2 Mon. .	120·4183	709·9433	199·7119	4182
23 Mar. (82)	3 Tues.	15 42 30	14 Mar. (73)	1 Sun. .	155·0579	645·9268	251·0217	4183
23 Mar. (82)	4 Wed.	21 55 0	3 Mar. (62)	5 Thur.	30·7413	493·1616	220·1978	4184
24 Mar. (83)	6 Fri. .	4 7 30	22 Mar. (81)	4 Wed.	65·3809	429·1451	271·5066	4185
23 Mar. (83)	0 Sat. .	10 20 0	10 Mar. (70)	1 Sun. .	9941·0643	276·3799	240·6836	4186
23 Mar. (82)	1 Sun. .	16 32 30	27 Feb. (58)	5 Thur.	9816·7477	123·6148	209·8598	4187
23 Mar. (82)	2 Mon. .	22 45 0	18 Mar. (77)	4 Wed.	9851·3873	59·5982	261·1695	4188
24 Mar. (83)	4 Wed.	4 57 30	8 Mar. (67)	2 Mon. .	65·7026	943·1247	233·0835	4189
23 Mar. (83)	5 Thur.	11 10 0	26 Feb. (57)	0 Sat. .	280·0178	826·6511	204·9974	4190
23 Mar. (82)	6 Fri. .	17 22 30	16 Mar. (75)	6 Fri. .	314·6574	762·6346	256·3071	4191
23 Mar. (82)	0 Sat. .	23 35 0	5 Mar. (64)	3 Tues.	190·3408	608·8694	225·4833	4192
24 Mar. (83)	2 Mon. .	5 47 30	23 Mar. (82)	1 Sun. .	9886·3486	509·5613	274·0551	4193
23 Mar. (83)	3 Tues.	12 0 0	11 Mar. (71)	5 Thur.	9762·0319	356·7962	243·2313	4194
23 Mar. (82)	4 Wed.	18 12 30	1 Mar. (60)	3 Tues.	9976·3472	240·3225	215·1452	4195
24 Mar. (83)	6 Fri. .	0 25 0	20 Mar. (79)	2 Mon. .	10·9868	176·3061	266·4550	4196

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Saṁvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4197	1018	1153	502	270-71	1095-96	9 Yuvan . .	12 Bahudhānya .	...
4198	1019	1154	503	271-72	*1096-97	10 Dhātri . .	13 Pramāthin .	3 Jyēshṭha .
4199	1020	1155	504	272-73	1097-98	11 Īśvara . .	14 Vikrama .	...
4200	1021	1156	505	273-74	1098-99	12 Bahudhānya .	15 Vṛisha . .	...
4201	1022	1157	506	274-75	1099-1100	13 Pramāthin .	16 Chitrabhānu .	2 Vaiśākha .
4202	1023	1158	507	275-76	*1100-01	14 Vikrama .	17 Subhānu .	...
4203	1024	1159	508	276-77	1101-02	15 Vṛisha . .	18 Tāraṇa . .	6 Bhādrapada
4204	1025	1160	509	277-78	1102-03	16 Chitrabhānu .	19 Pārthiva .	...
4205	1026	1161	510	278-79	1103-04	17 Subhānu .	20 Vyaya . .	...
4206	1027	1162	511	279-80	*1104-05	18 Tāraṇa . .	21 Sarvajit .	4 Āshāḍha .
4207	1028	1163	512	280-81	1105-06	19 Pārthiva .	22 Sarvadhārin .	...
4208	1029	1164	513	281-82	1106-07	20 Vyaya . .	23 Virōdhin .	...
4209	1030	1165	514	282-83	1107-08	21 Sarvajit .	24 Vikṛita . .	3 Jyēshṭha .
4210	1031	1166	515	283-84	*1108-09	22 Sarvadhārin .	25 Khara . .	...
4211	1032	1167	516	284-85	1109-10	23 Virōdhin .	26 Nandana .	7 Āśvina .
4212	1033	1168	517	285-86	1110-11	24 Vikṛita . .	27 Vijaya . .	...
4213	1034	1169	518	286-87	1111-12	25 Khara . .	28 Jaya . .	...
4214	1035	1170	519	287-88	*1112-13	26 Nandana .	29 Manmatha .	5 Śrāvaṇa* .
4215	1036	1171	520	288-89	1113-14	27 Vijaya . .	30 Durmukha .	...
4216	1037	1172	521	289-90	1114-15	28 Jaya . .	31 Hēmalamba .	...
4217	1038	1173	522	290-91	1115-16	29 Manmatha .	32 Vilamba .	3 Jyēshṭha .
4218	1039	1174	523	291-92	*1116-17	30 Durmukha .	33 Vikārin . .	...
4219	1040	1175	524	292-93	1117-18	31 Hēmalamba .	34 Śārvarin .	...
4220	1041	1176	525	293-94	1118-19	32 Vilamba .	35 Plava . .	1 Chaitra .
4221	1042	1177	526	294-95	1119-20	33 Vikārin . .	36 Śubhakṛit .	...

LXI—*Contd.*

COMMENCEMENT OF THE								Kali.
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					
Day and month, A.D.	Week-day.	Time of true Mēsha-saṁkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
24 Mar. (83)	0 Sat. .	6 37 30	9 Mar. (68)	6 Fri. .	9886·6702	23·5409	235·6311	4197
23 Mar. (83)	1 Sun. .	12 50 0	27 Feb. (58)	4 Wed.	100·9855	907·0673	207·5451	4198
23 Mar. (82)	2 Mon. .	19 2 30	17 Mar. (76)	3 Tues.	135·6251	843·0508	258·8547	4199
24 Mar. (83)	4 Wed.	1 15 0	6 Mar. (65)	0 Sat. .	11·3085	690·2856	227·9309	4200
24 Mar. (83)	5 Thur.	7 27 30	24 Feb. (55)	5 Thur.	225·6237	573·8121	199·9448	4201
23 Mar. (83)	6 Fri. .	13 40 0	13 Mar. (73)	3 Tues.	9921·6314	473·5040	248·5168	4202
23 Mar. (82)	0 Sat. .	19 52 30	2 Mar. (61)	0 Sat. .	9767·3148	320·7388	217·6929	4203
24 Mar. (83)	2 Mon. .	2 5 0	21 Mar. (80)	6 Fri. .	9831·9544	256·7233	269·0026	4204
24 Mar. (83)	3 Tues.	8 17 30	11 Mar. (70)	4 Wed.	46·2697	140·2487	240·9165	4205
23 Mar. (83)	4 Wed.	14 30 0	28 Feb. (59)	1 Sun. .	9921·9531	987·4835	216·0927	4206
23 Mar. (82)	5 Thur	20 42 30	18 Mar. (77)	0 Sat. .	9956·5927	923·4670	261·4024	4207
24 Mar (83)	0 Sat. .	2 55 0	8 Mar. (67)	5 Thur..	170·9080	806·9935	233·3163	4208
24 Mar. (83)	1 Sun. .	9 7 30	25 Feb. (56)	2 Mon. .	46·5913	654·2283	202·4925	4209
23 Mar. (83)	2 Mon. .	15 20 0	15 Mar. (75)	1 Sun. .	81·2310	590·2118	253·8022	4210
23 Mar. (82)	3 Tues.	21 32 30	4 Mar. (63)	5 Thur.	9956·9143	437·4466	222·9783	4211
24 Mar. (83)	5 Thur.	3 45 0	23 Mar. (82)	4 Wed. .	9991 5540	373·4301	274·2980	4212
24 Mar. (83)	6 Fri. .	9 57 30	12 Mar. (71)	1 Sun. .	9867·2374	220·6649	243·4642	4213
23 Mar. (83)	0 Sat. .	16 10 0	1 Mar. (61)	6 Fri. .	81·5526	104·1913	215·3781	4214
23 Mar. (82)	1 Sun. .	22 22 30	20 Mar. (79)	5 Thur.	116·1922	40·1749	266·6879	4215
24 Mar. (83)	3 Tues.	4 35 0	9 Mar. (68)	2 Mon.	9991·8755	887·4097	235·8740	4216
24 Mar. (83)	4 Wed.	10 47 30	27 Feb. (58)	0 Sat. .	206·1909	770·9361	207·7779	4217
23 Mar. (83)	5 Thur.	17 0 0	17 Mar. (77)	6 Fri. .	240·8305	706·9196	259·0866	4218
23 Mar. (82)	6 Fri. .	23 12 30	6 Mar. (65)	3 Tues.	116·5138	554·1544	228·2638	4219
24 Mar. (83)	1 Sun. .	5 25 0	23 Feb. (54)	0 Sat. .	9992·1972	401·3892	197·4399	4220
24 Mar. (83)	2 Mon. .	11 37 30	14 Mar. (73)	6 Fri. .	26·8368	337·3727	248·7497	4221

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Samvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4222	1043	1178	527	295-96	*1120-21	34 Śārvarin .	37 Śōbhana .	6 Bhādrapada .
4223	1044	1179	528	296-97	1121-22	35 Plava . .	38 Krōdhin .	...
4224	1045	1180	529	297-98	1122-23	36 Śubhakṛit .	39 Viśvāvasu .	...
4225	1046	1181	530	298-99	1123-24	37 Śōbhana .	40 Parābhava .	4 Āshādha .
4226	1047	1182	531	299-300	*1124-25	38 Krōdhin .	41 Plavaṅga .	...
4227	1048	1183	532	300-01	1125-26	39 Viśvāvasu .	42 Kīlaka . .	...
4228	1049	1184	533	301-02	1126-27	40 Parābhava .	43 Saumya .	3 Jyēshṭha .
4229	1050	1185	534	302-03	1127-28	41 Plavanga .	44 Sādhāraṇa .	...
4230	1051	1186	535	303-04	*1128-29	42 Kīlaka . .	45 Virōdhakṛit .	7 Āśvina .
4231	1052	1187	536	304-05	1129-30	43 Saumya .	46 Paridhāvin .	...
4232	1053	1188	537	305-06	1130-31	44 Sādhāraṇa .	47 Pramādin .	...
4233	1054	1189	538	306-07	1131-32	45 Virōdhakrit .	48 Ānanda .	5 Śrāvaṇa .
4234	1055	1190	539	307-08	*1132-33	46 Paridhāvin .	49 Rākshasa .	...
4235	1056	1191	540	308-09	1133-34	47 Pramādin .	50 Anala . .	...
4236	1057	1192	541	309-10	1134-35	48 Ānanda .	51 Piṅgala .	3 Jyēshṭha .
4237	1058	1193	542	310-11	1135-36	49 Rākshasa .	52 Kālayukta .	...
4238	1059	1194	543	311-12	*1136-37	50 Anala . .	53 Siddhārthin .	...
4239	1060	1195	544	312-13	1137-38	51 Piṅgala .	54 Raudra .	1 Chaitra .
4240	1061	1196	545	313-14	1138-39	52 Kālayukta .	55 Durmati .	...
4241	1062	1197	546	314-15	1139-40	53 Siddhārthin .	56 Dundubhi .	5 Śrāvaṇa .
4242	1063	1198	547	315-16	*1140-41	54 Raudra .	57 Rudhirōdgārin	...
4243	1064	1199	548	316-17	1141-42	55 Durmati .	58 Raktāksha .	...
4244	1065	1200	549	317-18	1142-43	56 Dundubhi .	59 Krōdhana .	4 Āshāḍha .
4245	1066	1201	550	318-19	1143-44	57 Rudhirōdgārin	60 Kshaya .	...
4246	1067	1202	551	319-20	*1144-45	58 Raktāksha .	1 Prabhava .	...

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.				LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.		Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17		19	20	23	24	25	1
		H. M. S.							
23 Mar. (83)	3 Tues.	17 50 0		2 Mar. (62)	3 Tues.	9902·5202	184 6076	217·9258	4222
24 Mar. (83)	5 Thur.	0 2 30		21 Mar. (80)	2 Mon. .	9937·1598	120·5911	269·2355	4223
24 Mar. (83)	6 Fri. .	6 15 0		11 Mar. (70)	0 Sat. .	151·4751	4·1174	241 1494	4224
24 Mar (83)	0 Sat. .	12 27 30		28 Feb. (59)	4 Wed.	27·1585	851·3523	210·3256	4225
23 Mar. (83)	1 Sun. .	18 40 0		18 Mar. (78)	3 Tues.	61·7981	787·3358	261·6353	4226
24 Mar. (83)	3 Tues.	0 52 30		8 Mar. (67)	1 Sun. .	276·1134	670·8622	233·5493	4227
24 Mar. (83)	4 Wed.	7 5 0		25 Feb. (56)	5 Thur.	151·7967	518·0970	202·7254	4228
24 Mar. (83)	5 Thur.	13 17 30		15 Mar. (74)	3 Tues.	9347·8045	416·7889	251·2974	4229
23 Mar. (83)	6 Fri. .	19 30 0		3 Mar. (63)	0 Sat. .	9723·4879	265·0237	220·4734	4230
24 Mar. (83)	1 Sun. .	1 42 30		22 Mar. (81)	6 Fri. .	9758·1275	201·0072	271·7832	4231
24 Mar. (83)	2 Mon. .	7 55 0		12 Mar. (71)	4 Wed.	9972·4428	84·5337	243·7071	4232
24 Mar. (83)	3 Tues.	14 7 30		2 Mar (61)	2 Mon. .	186·7580	968·0600	215·6120	4233
23 Mar. (83)	4 Wed.	20 20 0		20 Mar. (80)	1 Sun. .	221·3976	904 0436	266·9208	4234
24 Mar. (83)	6 Fri. .	2 32 30		9 Mar. (68)	5 Thur.	97·0810	751·2784	236 0969	4235
24 Mar. (83)	0 Sat. .	8 45 0		26 Feb. (57)	2 Mon. .	9972·7644	598·5132	205·2730	4236
24 Mar. (83)	1 Sun. .	14 57 30		17 Mar. (76)	1 Sun. .	7·4040	534·4967	256·5727	4237
23 Mar. (83)	2 Mon. .	21 10 0		5 Mar. (65)	5 Thur.	9883·0874	381·7315	225·7589	4238
24 Mar. (83)	4 Wed.	3 22 30		22 Feb. (53)	2 Mon. .	9758·7708	228·9664	194·9350	4239
24 Mar. (83)	5 Thur.	9 35 0		13 Mar (72)	1 Sun. .	9793·4104	164·9498	246·2448	4240
24 Mar. (83)	6 Fri. .	15 47 30		3 Mar. (62)	6 Fri. .	7·7257	48·4763	218·1587	4241
23 Mar. (83)	0 Sat .	22 0 0		21 Mar. (81)	5 Thur.	42·3653	984·4598	269·4685	4242
24 Mar. (83)	2 Mon. .	4 12 30		11 Mar. (70)	3 Tues.	256·6806	867·9862	241·3823	4243
24 Mar. (83)	3 Tues.	10 25 0		28 Feb. (59)	0 Sat. .	132·3640	715·2210	210·5585	4244
24 Mar. (83)	4 Wed.	16 37 30		19 Mar. (78)	6 Fri. .	167·0036	651·2045	261·8682	4245
23 Mar. (83)	5 Thur.	22 50 0		7 Mar. (67)	3 Tues.	42·6869	498·4393	231·0444	4246

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Samvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4247	1068	1203	552	320-21	1145-46	59 Krōdhana .	2 Vibhava .	2 Vaiśākha .
4248	1069	1204	553	321-22	1146-47	60 Kshaya .	3 Śukla . .	...
4249	1070	1205	554	322-23	1147-48	1 Prabhava .	4 Pramōda .	6 Bhādrapada
4250	1071	1206	555	323-24	*1148-49	2 Vibhava .	5 Prajāpati .	...
4251	1072	1207	556	324-25	1149-50	3 Śukla . .	6 Āṅgirasa .	...
4252	1073	1208	557	325-26	1150-51	4 Pramōda .	7 Śrīmukha .	5 Śrāvaṇa .
4253	1074	1209	558	326-27	1151-52	5 Prajāpati .	8 Bhāva . .	...
4254	1075	1210	559	327-28	*1152-53	6 Āngirasa .	9 Yuvan . .	...
4255	1076	1211	560	328-29	1153-54	7 Śrīmukha .	10 Dhātṛi . .	3 Jyēshṭha .
4256	1077	1212	561	329-30	1154-55	8 Bhāva . .	11 Īśvara . .	...
4257	1078	1213	562	330-31	1155-56	9 Yuvan . .	12 Bahudhānya .	...
4258	1079	1214	563	331-32	*1156-57	10 Dhātṛi . .	13 Pramāthin .	1 Chaitra .
4259	1080	1215	564	332-33	1157-58	11 Īśvara . .	14 Vikrama .	...
4260	1081	1216	565	333-34	1158-59	12 Bahudhānya .	15 Vṛisha . .	5 Śrāvaṇa . .
4261	1082	1217	566	334-35	1159-60	13 Pramāthin .	16 Chitrabhānu .	...
4262	1083	1218	567	335-36	*1160-61	14 Vikrama .	17 Subhānu† .	...
4263	1084	1219	568	336-37	1161-62	15 Vṛisha . .	19 *Pārthiva* .	4 Āshāḍha .
4264	1085	1220	569	337-38	1162-63	16 Chitrabhānu .	20 *Vyaya* . .	...
4265	1086	1221	570	338-39	1163-64	17 Subhānu .	21 *Sarvajit* .	...
4266	1087	1222	571	339-40	*1164-65	18 Tāraṇa . .	22 *Sarvadhārin* .	2 Vaiśākha .
4267	1088	1223	572	340 41	1165 66	19 Pārthiva .	23 Virōdhin .	...
4268	1089	1224	573	341-42	1166-67	20 Vyaya . .	24 Vikṛita . .	6 Bhādrapada
4269	1090	1225	574	342-43	1167-68	21 Sarvajit .	25 Khara . .	...
4270	1091	1226	575	343-44	*1168-69	22 Sarvadhārin .	26 Nandana .	...
4271	1092	1227	576	344-45	1169-70	23 Virōdhin .	27 Vijaya . .	5 Śrāvaṇa .

† 18 Tāraṇa was suppressed in the north.

LXI—*Contd.*

COMMENCEMENT OF THE SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.	Day and month, A.D.	Week-day.	*a.*	*b*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
24 Mar. (83)	0 Sat. .	5 2 30	24 Feb. (55)	0 Sat. .	9918·3703	345 6741	200·2205	4247
24 Mar. (83)	1 Sun. .	11 15 0	15 Mar. (74)	6 Fri. .	9953·0099	281·6576	251·4803	4248
24 Mar. (83)	2 Mon. .	17 27 30	4 Mar. (63)	3 Tues.	9828·6934	128·8925	220·7963	4249
23 Mar. (83)	3 Tues.	23 40 0	22 Mar. (82)	2 Mon. .	9863·3329	64·8760	271·2161	4250
24 Mar. (83)	5 Thur.	5 52 30	12 Mar. (71)	0 Sat. .	77·6481	948·4024	243·9300	4251
24 Mar. (83)	6 Fri. .	12 5 0	2 Mar. (61)	5 Thur.	291·9634	831 9288	215·8439	4252
24 Mar. (83)	0 Sat. .	18 17 30	21 Mar. (80)	4 Wed.	326·6030	767 9126	267·1537	4253
24 Mar. (84)	2 Mon. .	0 30 0	9 Mar. (69) .	1 Sun. .	202·2864	615·1471	236·3298	4254
24 Mar. (83)	3 Tues.	6 42 30	26 Feb. (57)	5 Thur.	77·9698	462·3819	205 5071	4255
24 Mar. (83)	4 Wed.	12 55 0	16 Mar. (75)	3 Tues.	9773 9776	362·0739	254·0778	4256
24 Mar. (83)	5 Thur.	19 7 30	6 Mar. (65)	1 Sun. .	9988·2928	245·6002	225·9918	4257
24 Mar. (84)	0 Sat. .	1 20 0	23 Feb. (54)	5 Thur.	9863·9762	92·8351	195 1679	4258
24 Mar. (83)	1 Sun. .	7 32 30	13 Mar. (72)	4 Wed.	9899 0158	29 8186	246·4777	4259
24 Mar. (83)	2 Mon. .	13 45 0	3 Mar. (62)	2 Mon. .	112·9311	912·3451	218 3916	4260
24 Mar. (83)	3 Tues.	19 57 30	22 Mar. (81)	1 Sun. .	147·5707	818·3285	269·7014	4261
24 Mar. (84)	5 Thur.	2 10 0	10 Mar. (70)	5 Thur.	23·2541	695·5633	238 8774	4262
24 Mar. (83)	6 Fri. .	8 22 30	27 Feb. (58)	2 Mon. .	9899·3375	542·7982	208·0536	4263
24 Mar. (83)	0 Sat. .	14 35 0	18 Mar. (77)	1 Sun. .	9933·5672	478·7816	259·3633	4264
24 Mar. (83)	1 Sun. .	20 47 30	7 Mar. (66)	5 Thur.	9809·2605	326·0164	228·5395	4265
24 Mar. (84)	3 Tues.	3 0 0	25 Feb. (56)	3 Tues.	23·5758	209·5429	200·4534	4266
24 Mar. (83)	4 Wed.	9 12 30	15 Mar. (74)	2 Mon	58·2354	145·5264	251·7632	4267
24 Mar. (83)	5 Thur.	15 25 0	4 Mar. (63)	6 Fri. .	9933·8988	992·7612	220·9392	4268
24 Mar. (83)	6 Fri. .	21 37 30	23 Mar. (82)	5 Thur.	9968·5284	928·7447	272·2489	4269
24 Mar. (84)	1 Sun. .	3 50 0	12 Mar. (72)	3 Tues.	182·8537	812·2712	244·1629	4270
24 Mar. (83)	2 Mon. .	10 2 30	1 Mar. (60)	0 Sat. .	58·5371	659·5059	213·3391	4271

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Saṃvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4272	1093	1228	577	345-46	1170-71	24 Vikṛita . .	28 Jaya . .	...
4273	1094	1229	578	346-47	1171-72	25 Khara . .	29 Manmatha .	...
4274	1095	1230	579	347-48	*1172-73	26 Nandana .	30 Durmukha .	3 Jyēshṭha .
4275	1096	1231	580	348-49	1173-74	27 Vijaya . .	31 Hēmalamba .	...
4276	1097	1232	581	349-50	1174-75	28 Jaya . .	32 Vilamba .	...
4277	1098	1233	582	350-51	1175-76	29 Manmatha .	33 Vikārin . .	1 Chaitra .
4278	1099	1234	583	351-52	*1176-77	30 Durmukha .	34 Śārvarin .	...
4279	1100	1235	584	352-53	1177-78	31 Hēmalamba .	35 Plava . .	5 Śrāvaṇa .
4280	1101	1236	585	353-54	1178-79	32 Vilamba .	36 Śubhakṛit .	...
4281	1102	1237	586	354-55	1179-80	33 Vikārin .	37 Śōbhana .	...
4282	1103	1238	587	355-56	*1180-81	34 Śārvarin .	38 Krōdhin .	4 Āshādha .
4283	1104	1239	588	356-57	1181-82	35 Plava . .	39 Viśvāvasu .	...
4284	1105	1240	589	357-58	1182-83	36 Śubhakṛit .	40 Parābhava .	...
4285	1106	1241	590	358-59	1183-84	37 Śōbhana .	41 Plavaṅga .	2 Vaiśākha .
4286	1107	1242	591	359-60	*1184-85	38 Krōdhin .	42 Kīlaka . .	...
4287	1108	1243	592	360-61	1185-86	39 Viśvāvasu .	43 Saumya .	6 Bhādrapada
4288	1109	1244	593	361-62	1186-87	40 Parābhava .	44 Sādhāraṇa .	...
4289	1110	1245	594	362-63	1187-88	41 Plavaṅga .	45 Virōdhakṛit .	...
4290	1111	1246	595	363-64	*1188-89	42 Kīlaka . .	46 Paridhāvin .	5 Śrāvaṇa .
4291	1112	1247	596	364-65	1189-90	43 Saumya. .	47 Pramādin .	...
4292	1113	1248	597	365-66	1190-91	44 Sādhāraṇa .	48 Ānanda .	...
4293	1114	1249	598	366-67	1191-92	45 Virōdhakṛit .	49 Rākshasa .	3 Jyēshṭha .
4294	1115	1250	599	367-68	*1192-93	46 Paridhāvin .	50 Anala . .	...
4295	1116	1251	600	368-69	1193-94	47 Pramādin .	51 Piṅgala	7 Āśvina 10 *Pausha* (*ksh.*)
4296	1117	1252	601	369-70	1194-95	48 Ānanda .	52 Kālayukta .	1 Chaitra .

* Tārana was suppressed in the north.

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.				LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day of month, A.D.	Week-day.	Time of true Mēsha-saṁkrānti.		Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17		19	20	23	24	25	1
		H. M. S							
24 Mar. (83)	3 Tues.	16 15 0		20 Mar. (79)	6 Fri. .	93·1767	595·4895	264·6488	4272
24 Mar. (83)	4 Wed.	22 27 30		9 Mar. (68)	3 Tues.	9968·8601	442·7243	233·8250	4273
24 Mar. (84)	6 Fri. .	4 40 0		26 Feb. (57)	0 Sat. .	9844·5534	289·9591	203·0010	4274
24 Mar. (83)	0 Sat. .	10 52 30		16 Mar. (75)	6 Fri. .	9879·1831	225·9426	254·3107	4275
24 Mar. (83)	1 Sun. .	17 5 0		6 Mar. (65)	4 Wed.	93·4983	109·4690	226·2247	4276
24 Mar. (83)	2 Mon. .	23 17 30		23 Feb. (54)	1 Sun. .	9969·1816	956·7039	195·4008	4277
24 Mar. (84)	4 Wed.	5 30 0		13 Mar. (73)	0 Sat. .	3·8212	892·6873	246·7106	4278
24 Mar. (83)	5 Thur.	11 42 30		3 Mar. (62)	5 Thur.	218·1365	776·2138	218·6245	4279
24 Mar. (83)	6 Fri. .	17 55 0		22 Mar (81)	4 Wed.	252·7762	712·1973	269·9343	4280
25 Mar (84)	1 Sun. .	0 7 30		11 Mar. (70)	1 Sun. .	128·4595	559·4320	239·1103	4281
24 Mar. (84)	2 Mon. .	6 20 0		28 Feb. (59)	5 Thur	4·1429	406·6669	208·2851	4282
24 Mar. (83)	3 Tues.	12 32 30		18 Mar. (77)	4 Wed.	38·7825	342·6504	259·5962	4283
24 Mar. (83)	4 Wed.	18 45 0		7 Mar. (66)	1 Sun. .	9914·4659	189·8851	228·7724	4284
25 Mar. (84)	6 Fri. .	0 57 30		24 Feb. (55)	5 Thur.	9790·1493	37·1200	197·9485	4285
24 Mar. (84)	0 Sat. .	7 10 0		15 Mar. (75)	5 Thur.	163·4208	9·3951	251·9960	4286
24 Mar. (83)	1 Sun. .	13 22 30		4 Mar. (63)	2 Mon. .	39·1042	856·6300	221·1721	4287
24 Mar. (83)	2 Mon. .	19 35 0		23 Mar. (82)	1 Sun. .	73·7438	792 6134	272·4618	4288
25 Mar. (84)	4 Wed.	1 47 30		13 Mar. (72)	6 Fri. .	288·0591	676·1399	244·3958	4289
24 Mar. (84)	5 Thur.	8 0 0		1 Mar. (61)	3 Tues.	163·7425	523·2747	213·5720	4290
24 Mar. (83)	6 Fri. .	14 12 30		19 Mar. (78)	1 Sun.	9859·7302	423·0665	262·1439	4291
24 Mar. (83)	0 Sat. .	20 25 0		8 Mar. (67)	5 Thur.	9735·4336	270·3014	231·3201	4292
25 Mar. (84)	2 Mon. .	2 37 30		26 Feb. (57)	3 Tues.	9949·7488	153·8278	203·2339	4293
24 Mar. (84	3 Tues.	8 50 0		16 Mar. (76)	2 Mon. .	9984·3885	89·8114	254·5436	4294
24 Mar. (83)	4 Wed.	15 2 30		6 Mar. (65)	0 Sat. .	198·7037	973·3377	226·4576	4295
24 Mar. (83)	5 Thur.	21 15 0		23 Feb. (54)	4 Wed.	74·3871	820·5726	195·6337	4296

TABLE

CONCURRENT YEAR.								
Kali	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D	Jovian Saṁvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4297	1118	1253	602	370-71	1195-96	49 Rākshasa .	53 Siddhārthin .	...
4298	1119	1254	603	371-72	*1196 97	50 Anala . .	54 Raudra .	5 Śrāvaṇa .
4299	1120	1255	604	372-73	1197 98	51 Pingala . .	55 Durmati .	...
4300	1121	1256	605	373 74	1198-99	52 Kālayukta .	56 Dundubhi .	...
4301	1122	1257	606	374-75	1199 1200	53 Siddhārthin .	57 Rudhirōdgārin	4 Āshādha .
4302	1123	1258	607	375-76	*1200 01	54 Raudra . .	58 Raktāksha .	...
4303	1124	1259	608	376 77	1201 02	55 Durmati .	59 Krōdhana .	...
4304	1125	1260	609	377-78	1202 03	56 Dundubhi	60 Kshaya .	2 Vaiśākha .
4305	1126	1261	610	378-79	1203-04	57 Rudhirōdgārin	1 Prabhava .	...
4306	1127	1262	611	379 80	*1204-05	58 Raktāksha .	2 Vibhava .	6 Bhādrapada
4307	1128	1263	612	380 81	1205 06	59 Krōdhana .	3 Śukla . .	...
4308	1129	1264	613	381-82	1206-07	60 Kshaya .	4 Pramōda .	...
4309	1130	1265	614	382 83	1207-08	1 Prabhava .	5 Prajāpati	4 Āshādha .
4310	1131	1266	615	383 84	*1208-09	2 Vibhava .	6 Āngirasa .	...
4311	1132	1267	616	384 85	1209 10	3 Śukla . .	7 Śrīmukha .	...
4312	1133	1268	617	385-86	1210-11	4 Pramōda .	8 Bhāva . .	3 Jyēshṭha .
4313	1134	1269	618	386-87	1211 12	5 Prajāpati .	9 Yuvan . .	...
4314	1135	1270	619	387 88	*1212-13	6 Āngirasa .	10 Dhātṛi .	7 Āśvina 11 *Māgha* (*ksh.*) 12 Phālguna
4315	1136	1271	620	388-89	1213 14	7 Śrīmukha .	11 Īśvara . .	...
4316	1137	1272	621	389-90	1214-15	8 Bhāva .	12 Bahudhānya .	...
4317	1138	1273	622	390 91	1215-16	9 Yuvan . .	13 Pramāthin .	5 Śrāvaṇa .
4318	1139	1274	623	391 92	*1216-17	10 Dhātṛi . .	14 Vikrama .	...
4319	1140	1275	624	392 93	1217-18	11 Īśvara . .	15 Vṛisha . .	...
4320	1141	1276	625	393 94	1218-19	12 Bahudhānya .	16 Chitrabhānu .	3 Jyēshṭha .
4321	1142	1277	626	394 95	1219 20	13 Pramāthin .	17 Subhānu .	...

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha samkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
25 Mar. (84)	0 Sat. .	3 27 30	14 Mar. (73)	3 Tues.	109·0267	756·5561	246·9435	4297
24 Mar. (84)	1 Sun. .	9 40 0	2 Mar. (62)	0 Sat. .	9984·7101	603 7908	216·1196	4298
24 Mar. (83)	2 Mon. .	15 52 30	21 Mar. (80)	6 Fri. .	19·3497	539·7744	267·4293	4299
24 Mar. (83)	3 Tues.	22 5 0	10 Mar. (69)	3 Tues.	9895 0331	387·0092	236·6054	4300
25 Mar. (84)	5 Thur.	4 17 30	27 Feb. (58)	0 Sat. .	9770·7165	234·2441	205·7817	4301
24 Mar. (84)	6 Fri. .	10 30 0	17 Mar. (77)	6 Fri. .	9805·3561	170·2276	257·0914	4302
24 Mar (83)	0 Sat. .	16 42 30	7 Mar. (66)	4 Wed.	19·6714	53·7540	229·0054	4303
24 Mar. (83)	1 Sun. .	22 55 0	25 Feb. (56)	2 Mon. .	233 9866	937·2804	200·9192	4304
25 Mar. (84)	3 Tues.	5 7 30	16 Mar. (75)	1 Sun. .	268·6263	873·2640	252·2289	4305
24 Mar. (84)	4 Wed.	11 20 0	4 Mar. (64)	5 Thur.	144·3096	720·4987	221·4051	4306
24 Mar. (83)	5 Thur.	17 32 30	23 Mar. (82)	4 Wed.	178·9493	656·4823	272·7148	4307
24 Mar. (83)	6 Fri. .	23 45 0	12 Mar (71)	1 Sun. .	54·6327	503·7171	241·8910	4308
25 Mar. (84)	1 Sun. .	5 57 30	1 Mar. (60)	5 Thur.	9930·3161	350·9519	211·0672	4309
24 Mar. (84)	2 Mon.	12 10 0	19 Mar. (79)	4 Wed.	9964·9557	286·9354	262·3769	4310
24 Mar. (83)	3 Tues.	18 22 30	8 Mar. (67)	1 Sun. .	9840·6390	134·1702	231·5529	4311
25 Mar. (84)	5 Thur.	0 35 0	26 Feb. (57)	6 Fri. .	54·9543	13·6966	203·4669	4312
25 Mar. (84)	6 Fri. .	6 47 30	17 Mar. (76)	5 Thur.	89·5939	953·6801	254·7766	4313
24 Mar. (84)	0 Sat. .	13 0 0	6 Mar. (65)	3 Tues.	303·9092	837·2065	226·6906	4314
24 Mar. (83)	1 Sun. .	19 12 30	24 Mar. (83)	1 Sun. .	9999·9169	736·8985	275·2625	4315
25 Mar. (84)	3 Tues.	1 25 0	14 Mar. (73)	6 Fri. .	214·2321	620·4249	247·1765	4316
25 Mar. (84)	4 Wed.	7 37 30	3 Mar. (62)	3 Tues.	89·9156	467·6597	215·3526	4317
24 Mar. (84)	5 Thur.	13 50 0	20 Mar. (80)	1 Sun. .	9785·9233	367·3616	264·9245	4318
24 Mar. (83)	6 Fri. .	20 2 30	10 Mar. (69)	6 Fri. .	0·2385	250·8780	236·8384	4319
25 Mar. (84)	1 Sun. .	2 15 0	27 Feb. (58)	3 Tues.	9875·9219	98·1128	206·0146	4320
25 Mar. (84)	2 Mon. .	8 27 30	18 Mar. (77)	2 Mon. .	9910·5615	34·0963	257·3243	4321

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Samvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4322	1143	1278	627	395-96	*1220-21	14 Vikrama .	18 Tāraṇa . .	...
4323	1144	1279	628	396-97	1221-22	15 Vṛisha . .	19 Pārthiva .	2 Vaiśākha .
4324	1145	1280	629	397-98	1222-23	16 Chitrabhānu .	20 Vyaya . .	...
4325	1146	1281	630	398-99	1223-24	17 Subhānu .	21 Sarvajit .	6 Bhādrapada
4326	1147	1282	631	399-400	*1224-25	18 Tāraṇa . .	22 Sarvadhārin .	...
4327	1148	1283	632	400-01	1225-26	19 Pārthiva .	23 Virōdhin .	...
4328	1149	1284	633	401-02	1226-27	20 Vyaya . .	24 Vikṛita . .	4 Āshāḍha .
4329	1150	1285	634	402-03	1227-28	21 Sarvajit .	25 Khara . .	...
4330	1151	1286	635	403-04	*1228-29	22 Sarvadhārin .	26 Nandana .	...
4331	1152	1287	636	404-05	1229-30	23 Virōdhin .	27 Vijaya . .	3 Jyēshṭha .
4332	1153	1288	637	405-06	1230-31	24 Vikṛita . .	28 Jaya . .	...
4333	1154	1289	638	406-07	1231-32	25 Khaṛa . .	29 Manmatha .	7 Āśvina .
4334	1155	1290	639	407-08	*1232-33	26 Nandana .	30 Durmukha .	...
4335	1156	1291	640	408-09	1233-34	27 Vijaya . .	31 Hēmalamba .	...
4336	1157	1292	641	409-10	1234-35	28 Jaya . .	32 Vilamba .	5 Śrāvaṇa .
4337	1158	1293	642	410-11	1235-36	29 Manmatha .	33 Vikārin . .	...
4338	1159	1294	643	411-12	*1236-37	30 Durmukha .	34 Śārvarin .	...
4339	1160	1295	644	412-13	1237-38	31 Hēmalamba .	35 Plava . .	3 Jyēshṭha .
4340	1161	1296	645	413-14	1238-39	32 Vilamba .	36 Śubhakṛit .	...
4341	1162	1297	646	414-15	1239-40	33 Vikārin . .	37 Śōbhana .	...
4342	1163	1298	647	415-16	*1240-41	34 Śārvarin .	38 Krōdhin .	2 Vaiśākha .
4343	1164	1299	648	416-17	1241-42	35 Plava . .	39 Viśvāvasu .	...
4344	1165	1300	649	417-18	1242-43	36 Śubhakrit .	40 Parābhava .	6 Bhādrapada
4345	1166	1301	650	418-19	1243-44	37 Śōbhana .	41 Plavaṅga .	...
4346	1167	1302	651	419-20	*1244-45	38 Krōdhin .	42 Kīlaka . .	...

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.				LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.		Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17		19	20	23	24	25	1
		H. M. S.							
24 Mar. (84)	3 Tues.	14 40 0		7 Mar. (67)	0 Sat. .	124·8768	917·6228	229·2383	4322
24 Mar. (83)	4 Wed.	20 52 30		24 Feb. (55)	4 Wed.	0·5602	754·8576	198·4143	4323
25 Mar. (84)	6 Fri. .	3 5 0		15 Mar. (74)	3 Tues.	35·1998	700·8410	249·7241	4324
25 Mar. (84)	0 Sat. .	9 17 30		4 Mar. (63)	0 Sat. .	9910·8832	548·0759	218·9002	4325
24 Mar. (84)	1 Sun. .	15 30 0		22 Mar. (82)	6 Fri. .	9945·5228	484·0594	270·2099	4326
24 Mar. (83)	2 Mon. .	21 42 30		11 Mar. (70)	3 Tues.	9821·2062	331·2941	239·3861	4327
25 Mar. (84)	4 Wed.	3 55 0		1 Mar. (60)	1 Sun. .	35·5215	214·8206	211·3001	4328
25 Mar. (84)	5 Thur.	10 7 30		20 Mar. (79)	0 Sat. .	70·1611	150·8142	262·6098	4329
24 Mar. (84)	6 Fri. .	16 20 0		8 Mar. (68)	4 Wed.	9945·8444	998·0389	231·7858	4330
24 Mar. (83)	0 Sat. .	22 32 30		26 Feb. (57)	2 Mon. .	160·1597	881·5653	203·6998	4331
25 Mar. (84)	2 Mon. .	4 45 0		17 Mar. (76)	1 Sun. .	194·7993	817·5489	255·0095	4332
25 Mar. (84)	3 Tues.	10 57 30		6 Mar. (65)	5 Thur.	70·4827	664·7836	224·1857	4333
24 Mar. (84)	4 Wed.	17 10 0		24 Mar. (84)	4 Wed.	105·1223	600·7672	275·4954	4334
24 Mar. (83)	5 Thur.	23 22 30		13 Mar. (72)	1 Sun. .	9980·8057	448·0020	244·6716	4335
25 Mar. (84)	0 Sat. .	5 35 0		2 Mar. (61)	5 Thur.	9856·4891	295·2368	213·8476	4336
25 Mar. (84)	1 Sun. .	11 47 30		21 Mar. (80)	4 Wed.	9891·1287	231·2203	265·1574	4337
24 Mar. (84)	2 Mon. .	18 0 0		9 Mar. (69)	1 Sun. .	9766·8121	78·4551	234·3335	4338
25 Mar. (84)	4 Wed.	0 12 30		27 Feb. (58)	6 Fri. .	9981·1274	961·9816	206·2475	4339
25 Mar. (84)	5 Thur.	6 25 0		18 Mar. (77)	5 Thur.	15·7670	897·9640	257·5572	4340
25 Mar. (84)	6 Fri. .	12 37 30		8 Mar. (67)	3 Tues.	230·0823	781·4915	229·4612	4341
24 Mar. (84)	0 Sat. .	18 50 0		25 Feb. (56)	0 Sat. .	105·7656	628·7263	198·6473	4342
25 Mar. (84)	2 Mon. .	1 2 30		15 Mar. (74)	6 Fri. .	140·4053	564·7098	249·9570	4343
25 Mar. (84)	3 Tues.	7 15 0		4 Mar. (63)	3 Tues.	16·0887	411·9446	219·1331	4344
25 Mar. (84)	4 Wed.	13 27 30		23 Mar. (82)	2 Mon. .	50·7283	347·9281	270·4428	4345
24 Mar. (84)	5 Thur.	19 40 0		11 Mar. (71)	6 Fri. .	9926·4116	195·1629	239·6190	4346

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Saṁvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4347	1168	1303	652	420-21	1245-46	39 Viśvāvasu .	43 Saumya. .	4 Āshāḍha .
4348	1169	1304	653	421-22	1246-47	40 Parābhava .	44 Sādhāraṇa† .	...
4349	1170	1305	654	422-23	1247-48	41 Plavaṅga .	46 *Paridhāvin* .	...
4350	1171	1306	655	423-24	*1248-49	42 Kīlaka . .	47 *Pramādin* .	3 Jyēshṭha .
4351	1172	1307	656	424-25	1249-50	43 Saumya .	48 *Ānanda* .	...
4352	1173	1308	657	425-26	1250-51	44 Sādhāraṇa .	49 *Rākshasa* .	7 Āśvina .
4353	1174	1309	658	426-27	1251-52	45 Virōdhakṛit .	50 Anala . .	...
4354	1175	1310	659	427-28	*1252-53	46 Paridhāvin .	51 Piṅgala . .	...
4355	1176	1311	660	428-29	1253-54	47 Pramādin .	52 Kālayukta .	5 Śrāvaṇa .
4356	1177	1312	661	429-30	1254-55	48 Ānanda .	53 Siddhārthin .	...
4357	1178	1313	662	430-31	1255-56	49 Rākshasa .	54 Raudra .	...
4358	1179	1314	663	431-32	*1256-57	50 Anala . .	55 Durmati .	3 Jyēshṭha .
4359	1180	1315	664	432-33	1257-58	51 Piṅgala .	56 Dundubhi .	...
4360	1181	1316	665	433-34	1258-59	52 Kālayukta .	57 Rudhirōdgārin	8 Kārttika 10 *Pausha* (*ksh.*)
4361	1182	1317	666	434-35	1259-60	53 Siddhārthin .	58 Raktāksha .	1 Chaitra .
4362	1183	1318	667	435-36	*1260-61	54 Raudra .	59 Krōdhaṇa .	...
4363	1184	1319	668	436-37	1261-62	55 Durmati .	60 Kshaya .	6 Bhādrapada
4364	1185	1320	669	437-38	1262-63	56 Dundubhi .	1 Prabhava .	...
4365	1186	1321	670	438-39	1263-64	57 Rudhirōdgārin	2 Vibhava .	...
4366	1187	1322	671	439-40	*1264-65	58 Raktāksha .	3 Śukla . .	4 Āshāḍha .
4367	1188	1323	672	440-41	1265-66	59 Krōdhana .	4 Pramōda .	...
4368	1189	1324	673	441-42	1266-67	60 Kshaya .	5 Prājāpati .	...
4369	1190	1325	674	442-43	1267-68	1 Prabhava .	6 Āṅgirasa .	3 Jyēshṭha .
4370	1191	1326	675	443-44	*1268-69	2 Vibhava .	7 Śrīmukha .	...
4371	1192	1327	676	444-45	1269-70	3 Śukla . .	8 Bhāva . .	7 Āśvina .

† 45 Virōdhakṛit was suppressed in the north.

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.				LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-saṁkrānti.		Day and month, A.D.	Week-day.	*a.*	*b.*	*c*	
13	14	17		19	20	23	24	25	1
		H. M. S.							
25 Mar. (84)	0 Sat. .	1 52 30		28 Feb. (59)	3 Tues.	9802·0950	42·3977	208·7952	4347
25 Mar. (84)	1 Sun. .	8 5 0		20 Mar. (79)	3 Tues.	175·3365	14·6728	262·8427	4348
25 Mar. (84)	2 Mon. .	14 17 30		9 Mar. (68)	0 Sat. .	51·0499	861·9077	232·0187	4349
24 Mar. (84)	3 Tues.	20 30 0		27 Feb. (58)	5 Thur.	265·3651	745·4341	203·9327	4350
25 Mar. (84)	5 Thur.	2 42 30		17 Mar. (76)	4 Wed.	300·0047	681·4176	255·2424	4351
25 Mar. (84)	6 Fri. .	8 55 0		6 Mar. (65)	1 Sun. .	175·6881	528·6524	224·4186	4352
25 Mar. (84)	0 Sat. .	15 7 30		24 Mar. (83)	6 Fri. .	9871·6959	428·3444	274·9905	4353
24 Mar. (84)	1 Sun. .	21 20 0		12 Mar. (72)	3 Tues.	9747·3793	275·5791	242·1667	4354
25 Mar. (84)	3 Tues.	3 32 30		2 Mar. (61)	1 Sun. .	9961·6945	159·1055	214·0805	4355
25 Mar. (84)	4 Wed.	9 45 0		21 Mar. (80)	0 Sat. .	9996·3341	95·0891	265·3903	4356
25 Mar. (84)	5 Thur.	15 57 30		11 Mar. (70)	5 Thur.	210·6494	978·6154	237·3042	4357
24 Mar. (84)	6 Fri. .	22 10 0		28 Feb. (59)	2 Mon. .	86·3328	825·8503	206·4804	4358
25 Mar. (84)	1 Sun. .	4 22 30		18 Mar. (77)	1 Sun. .	120·9724	761·8338	257·7901	4359
25 Mar. (84)	2 Mon. .	10 35 0		7 Mar. (66)	5 Thur.	9996·6558	609·0686	226·9663	4360
25 Mar. (84)	3 Tues.	16 47 30		24 Feb. (55)	2 Mon. .	9872·3392	456·3034	196·1424	4361
24 Mar. (84)	4 Wed.	23 0 0		4 Mar. (74)	1 Sun. .	9906·9788	392·2869	247·4521	4362
25 Mar. (84)	6 Fri. .	5 12 30		3 Mar. (62)	5 Thur.	9782·6622	239·5218	216·6282	4363
25 Mar. (84)	0 Sat. .	11 25 0		22 Mar. (81)	4 Wed.	9817·3018	175·5052	267·9380	4364
25 Mar. (84)	1 Sun. .	17 37 30		12 Mar. (71)	2 Mon. .	31·6171	59·0317	239·8519	4365
24 Mar. (84)	2 Mon. .	23 50 0		29 Feb. (60)	6 Fri. .	9907·3005	906·2665	209·0281	4366
25 Mar. (84)	4 Wed.	6 2 30		20 Mar. (79)	6 Fri. .	280·5720	878·5417	263·0756	4367
25 Mar. (84)	5 Thur.	12 15 0		9 Mar. (68)	3 Tues.	156·2553	725·7764	232·2516	4368
25 Mar. (84)	6 Fri. .	18 27 30		26 Feb. (57)	0 Sat. .	31·9387	573·0112	201·4278	4369
25 Mar. (85)	1 Sun. .	0 40 0		16 Mar. (76)	6 Fri. .	66·5784	509·2864	255·4753	4370
25 Mar. (84)	2 Mon. .	6 52 30		5 Mar. (64)	3 Tues.	9942·2617	356·2295	221·9137	4371

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Saṁvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4372	1193	1328	677	445-46	1270-71	4 Pramōda .	9 Yuvan . .	...
4373	1194	1329	678	446-47	1271-72	5 Prajāpati .	10 Dhātṛi . .	...
4374	1195	1330	679	447-48	*1272-73	6 Āṅgirasa .	11 Īśvara . .	4 Āshāḍha .
4375	1196	1331	680	448-49	1273-74	7 Śrīmukha .	12 Bahudhānya .	...
4376	1197	1332	681	449-50	1274-75	8 Bhāva . .	13 Pramāthin .	...
4377	1198	1333	682	450-51	1275-76	9 Yuvan . .	14 Vikrama .	3 Jyēshṭha .
4378	1199	1334	683	451-52	*1276-77	10 Dhātṛi . .	15 Vṛisha . .	...
4379	1200	1335	684	452-53	1277-78	11 Īśvara . .	16 Chitrabhānu	9 Mārgaśira 10 *Pausha* (*ksh.*) 12 Phālguna
4380	1201	1336	685	453-54	1278-79	12 Bahudhānya .	17 Subhānu .	...
4381	1202	1337	686	454-55	1279-80	13 Pramāthin .	18 Tāraṇa . .	...
4382	1203	1338	687	455-56	*1280-81	14 Vikrama .	19 Pārthiva .	5 Śrāvaṇa .
4383	1204	1339	688	456-57	1281-82	15 Vṛisha . .	20 Vyaya . .	...
4384	1205	1340	689	457-58	1282-83	16 Chitrabhānu .	21 Sarvajit .	...
4385	1206	1341	690	458-59	1283-84	17 Subhānu .	22 Sarvadhārin .	4 Āshāḍha .
4386	1207	1342	691	459-60	*1284-85	18 Tāraṇa . .	23 Virōdhin .	...
4387	1208	1343	692	460-61	1285-86	19 Pārthiva .	24 Vikṛita . .	...
4388	1209	1344	693	461-62	1286-87	20 Vyaya . .	25 Khara . .	2 Vaiśākha .
4389	1210	1345	694	462-63	1287-88	21 Sarvajit. .	26 Nandana .	...
4390	1211	1346	695	463-64	*1288-89	22 Sarvadhārin .	27 Vijaya . .	6 Bhādrapada
4391	1212	1347	696	464-65	1289-90	23 Virōdhin .	28 Jaya . .	...
4392	1213	1348	697	465-66	1290-91	24 Vikṛita . .	29 Manmatha .	...
4393	1214	1349	698	466-67	1291-92	25 Khara . .	30 Durmukha .	4 Āshāḍha .
4394	1215	1350	699	467-68	*1292-93	26 Nandana .	31 Hēmalamba .	...
4395	1216	1351	700	468-69	1293 94	27 Vijaya . .	32 Vilamba .	...
4396	1217	1352	701	469-70	1294-95	28 Jaya . .	33 Vikārin . .	3 Jyēshṭha .

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.	Day and month, A.D.	Week-day	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
25 Mar. (84)	3 Tues.	13 5 0	24 Mar. (83)	2 Mon. .	9976·9014	292·2121	273·2234	4372
25 Mar. (84)	4 Wed.	19 17 30	13 Mar. (72)	6 Fri. .	9852·5848	139·4479	242·3996	4373
25 Mar. (85)	6 Fri. .	1 30 0	2 Mar. (62)	4 Wed. .	66·9000	22·9743	214·3134	4374
25 Mar. (84)	0 Sat. .	7 42 30	21 Mar. (80)	3 Tues.	101·5396	958·9578	265·6232	4375
25 Mar. (84)	1 Sun. .	13 55 0	10 Mar. (69)	0 Sat. .	9977·2230	806·1926	234·7993	4376
25 Mar. (84)	2 Mon. .	20 7 30	28 Feb. (59)	5 Thur.	191·5382	689·7191	206·7133	4377
25 Mar. (85)	4 Wed.	2 20 0	18 Mar. (78)	4 Wed.	226·1778	624·7025	258·0230	4378
25 Mar. (84)	5 Thur.	8 32 30	7 Mar. (66)	1 Sun. .	101·8612	472·9373	227·1992	4379
25 Mar. (84)	6 Fri. .	14 45 0	25 Mar. (84)	6 Fri. .	9797·8690	372·6293	275·7711	4380
25 Mar. (84)	0 Sat. .	20 57 30	15 Mar. (74)	4 Wed.	12·1842	256·1556	247·6750	4381
25 Mar. (85)	2 Mon. .	3 10 0	3 Mar. (63) .	1 Sun. .	9887·8676	103·3905	216·8611	4382
25 Mar. (84)	3 Tues.	9 22 30	22 Mar. (81)	0 Sat. .	9922·5072	39·3740	268·1709	4383
25 Mar. (84)	4 Wed.	15 35 0	12 Mar. (71)	5 Thur.	136·8225	922·9004	240·0848	4384
25 Mar. (84)	5 Thur.	21 47 30	1 Mar. (60)	2 Mon. .	12·5059	770·1352	209·2610	4385
25 Mar. (85)	0 Sat. .	4 0 0	19 Mar. (79)	1 Sun. .	47·1455	706·1187	260·5706	4386
25 Mar. (84)	1 Sun. .	10 12 30	8 Mar. (67)	5 Thur.	9922·8289	553·3536	229·7458	4387
25 Mar. (84)	2 Mon. .	16 25 0	25 Feb. (56)	2 Mon. .	9798·5122	400·5883	198·9229	4388
25 Mar. (84)	3 Tues.	22 37 30	16 Mar. (75)	1 Sun. .	9833·1519	336·5718	250·1827	4389
25 Mar. (85)	5 Thur.	4 50 0	5 Mar. (65)	6 Fri. .	47·4671	220·0983	222·1466	4390
25 Mar. (84)	6 Fri. .	11 2 30	23 Mar. (82)	4 Wed.	9743·4749	119·7901	270·7185	4391
25 Mar. (84)	0 Sat. .	17 15 0	13 Mar. (72)	2 Mon. .	9957·7901	3·3166	242·6325	4392
25 Mar. (84)	1 Sun. .	23 27 30	3 Mar. (62)	0 Sat. .	172·1054	886·8430	214 5463	4393
25 Mar. (85)	3 Tues.	5 40 0	21 Mar. (81)	6 Fri. .	206·7450	822·8266	265·8561	4394
25 Mar. (84)	4 Wed.	11 52 30	10 Mar. (69)	3 Tues.	82·4284	670·0613	235·0322	4395
25 Mar. (84)	5 Thur.	18 5 0	27 Feb. (58)	0 Sat. .	9958·1118	517·2962	204·2084	4396

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshadi solar year in Bengal.	Kollam.	A.D.	JOVIAN SAMVATSARA. Southern system.	JOVIAN SAMVATSARA. Northern system.	INTERCALATED (*adhika*) and SUPPRESSED (*kshaya*) LUNAR MONTHS (true).
1	2	3	3*a*	4	5	6	7	8
4397	1218	1353	702	470-71	1295-96	29 Manmatha .	34 Śārvarin .	...
4398	1219	1354	703	471-72	*1296-97	30 Durmukha .	35 Plava . .	12 Phālguna .
4399	1220	1355	704	472-73	1297-98	31 Hēmalamba .	36 Śubhakṛit .	...
4400	1221	1356	705	473-74	1298-99	32 Vilamba .	37 Śōbhana .	...
4401	1222	1357	706	474-75	1299-1300	33 Vikārin . .	38 Krōdhin .	5 Śrāvaṇa
4402	1223	1358	707	475-76	*1300-01	34 Śārvarin . .	39 Viśvāvasu .	...
4403	1224	1359	708	476-77	1301-02	35 Plava . .	40 Parābhava .	...
4404	1225	1360	709	477-78	1302-03	36 Śubhakṛit .	41 Plavaṅga .	4 Āshādha
4405	1226	1361	710	478-79	1303-04	37 Śōbhana .	42 Kīlaka . .	...
4406	1227	1362	711	479-80	*1304-05	38 Krōdhin .	43 Saumya .	...
4407	1228	1363	712	480-81	1305 06	39 Viśvāvasu .	44 Sādhārana .	2 Vaiśākha
4408	1229	1364	713	481-82	1306 07	40 Parābhava .	45 Virōdhakṛit .	...
4409	1230	1365	714	482-83	1307-08	41 Plavaṅga .	46 Paridhāvin .	6 Bhādrapada
4410	1231	1366	715	483-84	*1308-09	42 Kīlaka . .	47 Pramādin .	...
4411	1232	1367	716	484-85	1309-10	43 Saumya .	48 Ānanda .	...
4412	1233	1368	717	485-86	1310-11	44 Sādhāraṇa .	49 Rākshasa .	4 Āshāḍha
4413	1234	1369	718	486-87	1311-12	45 Virōdhakṛit .	50 Anala . .	...
4414	1235	1370	719	487-88	*1312-13	46 Paridhāvin .	51 Piṅgala .	...
4415	1236	1371	720	488-89	1313-14	47 Pramādin .	52 Kālayukta .	3 Jyēshṭha
4416	1237	1372	721	489-90	1314-15	48 Ānanda .	53 Siddhārthin .	...
4417	1238	1373	722	490-91	1315-16	49 Rākshasa .	54 Raudra .	12 Phālguna
4418	1239	1374	723	491-92	*1316-17	50 Anala . .	55 Durmati .	...
4419	1240	1375	724	492-93	1317-18	51 Piṅgala .	56 Dundubhi .	...
4420	1241	1376	725	493-94	1318-19	52 Kālayukta .	57 Rudhirōdgārin	5 Śrāvaṇa
4421	1242	1377	726	494-95	1319-20	53 Siddhārthin .	58 Raktāksha .	...

LXI—*Contd.*

COMMENCEMENT OF THE								
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-saṁkrānti.	Day and month, A.D.	Week-day	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
26 Mar. (85)	0 Sat. .	0 17 30	18 Mar. (77)	6 Fri. .	9992·7514	453·2797	255·5181	4397
25 Mar. (85)	1 Sun .	6 30 0	6 Mar. (66)	3 Tues.	9868·4348	300·5144	224·6943	4398
25 Mar. (84)	2 Mon. .	12 42 30	25 Mar. (84)	2 Mon. .	9903·0744	236·4980	276·0039	4399
25 Mar. (84)	3 Tues.	18 55 0	14 Mar. (73)	6 Fri. .	9778·7578	83·7328	245·1801	4400
26 Mar. (85)	5 Thur.	1 7 30	4 Mar. (63)	4 Wed.	9993·0731	967·2592	217·0940	4401
25 Mar. (85)	6 Fri. .	7 20 0	22 Mar. (82)	3 Tues.	27·7127	903·2427	258·4038	4402
25 Mar. (84)	0 Sat. .	13 32 30	12 Mar. (71)	1 Sun. .	242·0280	786·7691	240·3177	4403
25 Mar. (84)	1 Sun. .	19 45 0	1 Mar. (60)	5 Thur.	117·7114	634·0039	209·4938	4404
26 Mar. (85)	3 Tues.	1 57 30	20 Mar. (79)	4 Wed.	152·3510	569·9874	260·8035	4405
25 Mar. (85)	4 Wed.	8 10 0	8 Mar. (68)	1 Sun. .	28·0344	417·2222	229·9797	4406
25 Mar. (84)	5 Thur.	14 22 30	25 Feb. (56)	5 Thur.	9903·7177	264·4570	199·1558	4407
25 Mar. (84)	6 Fri. .	20 35 0	16 Mar. (75)	4 Wed.	9938·3574	200·4405	250·4656	4408
26 Mar. (85)	1 Sun. .	2 47 30	5 Mar. (64)	1 Sun. .	9814·0408	47·6754	219·6417	4409
25 Mar. (85)	2 Mon. .	9 0 0	23 Mar. (83)	0 Sat. .	9848·6804	983·7588	270·9514	4410
25 Mar. (84)	3 Tues.	15 12 30	13 Mar. (72)	5 Thur.	62·9956	867·1853	242·8653	4411
25 Mar. (84)	4 Wed.	21 25 0	3 Mar. (62)	3 Tues.	277·3109	750·7117	214·7792	4412
26 Mar. (85)	6 Fri. .	3 37 30	21 Mar. (80)	1 Sun. .	9973·3187	650·4036	263·3512	4413
25 Mar. (85)	0 Sat. .	9 50 0	10 Mar. (70)	6 Fri. .	187·6339	533·9300	235·2651	4414
25 Mar. (84)	1 Sun. .	16 2 30	27 Feb. (58)	3 Tues.	63·3172	381·1648	204·4413	4415
25 Mar. (84)	2 Mon .	22 15 0	17 Mar. (76)	1 Sun. .	9759·3250	280·8568	253·0132	4416
26 Mar. (85)	4 Wed.	4 27 30	7 Mar. (66)	6 Fri. .	9973·6403	164·3831	224·9271	4417
25 Mar. (85)	5 Thur.	10 40 0	25 Mar. (85)	5 Thur.	8·2799	100·3667	276·2368	4418
25 Mar. (84)	6 Fri. .	16 52 30	14 Mar. (73)	2 Mon. .	9883·9632	947·6015	245·4130	4419
25 Mar. (84)	0 Sat. .	23 5 0	4 Mar. (63)	0 Sat. .	98·2785	831·1279	217·3269	4420
26 Mar. (85)	2 Mon. .	5 17 30	23 Mar. (82)	6 Fri. .	132·9181	767·1114	268·6367	4421

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Samvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4422	1243	1378	727	495-96	*1320-21	54 Raudra .	59 Krōdhana .	...
4423	1244	1379	728	496-97	1321-22	55 Durmati .	60 Kshaya .	4 Āshāḍha .
4424	1245	1380	729	497-98	1322-23	56 Dundubhi .	1 Prabhava .	...
4425	1246	1381	730	498-99	1323-24	57 Rudhirōdgārin	2 Vibhava .	...
4426	1247	1382	731	499-500	*1324-25	58 Raktāksha .	3 Śukla . .	2 Vaiśākha .
4427	1248	1383	732	500-01	1325-26	59 Krōdhana .	4 Pramōda .	...
4428	1249	1384	733	501-02	1326-27	60 Kshaya .	5 Prajāpati .	6 Bhādrapada
4429	1250	1385	734	502-03	1327-28	1 Prabhava .	6 Āṅgirasa .	...
4430	1251	1386	735	503-04	*1328-29	2 Vibhava .	7 Śrīmukha .	...
4431	1252	1387	736	504-05	1329-30	3 Śukla . .	8 Bhāva . .	4 Āshāḍha .
4432	1253	1388	737	505-06	1330-31	4 Pramōda .	9 Yuvan . .	...
4433	1254	1389	738	506-07	1331-32	5 Prajāpati .	10 Dhātṛi † .	...
4434	1255	1390	739	507-08	*1332-33	6 Āṅgirasa .	12 *Bahudhānya* .	3 Jyēshṭha .
4435	1256	1391	740	508-09	1333-34	7 Śrīmukha .	13 *Pramāthin* .	...
4436	1257	1392	741	509-10	1334-35	8 Bhāva . .	14 *Vikrama*	7 Āsvina 10 *Pausha* (*ksh.*) 12 Phālguna
4437	1258	1393	742	510-11	1335-36	9 Yuvan . .	15 *Vṛisha* . .	...
4438	1259	1394	743	511-12	*1336-37	10 Dhātṛi . .	16 Chitrabhānu .	...
4439	1260	1395	744	512-13	1337-38	11 Īśvara . .	17 Subhānu .	5 Śrāvaṇa .
4440	1261	1396	745	513-14	1338-39	12 Bahudhānya .	18 Tāraṇa . .	...
4441	1262	1397	746	514-15	1339-40	13 Pramāthin .	19 Pārthiva .	...
4442	1263	1398	747	515-16	*1340-41	14 Vikrama .	20 Vyaya . .	4 Āshāḍha .
4443	1264	1399	748	516-17	1341-42	15 Vṛisha . .	21 Sarvajit .	...
4444	1265	1400	749	517-18	1342-43	16 Chitrabhānu .	22 Sarvadhārin .	...
4445	1266	1401	750	518-19	1343-44	17 Subhānu .	23 Virōdhin .	2 Vaiśākha .
4446	1267	1402	751	519-20	*1344-45	18 Tāraṇa . .	24 Vikṛita . .	...

† 11 Īśvara was suppressed in the north.

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.					LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-saṁkrānti.			Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17			19	20	23	24	25	1
		H.	M.	S.						
25 Mar. (85)	3 Tues.	11	30	0	11 Mar. (71)	3 Tues.	8·6015	614·3462	237·8628	4422
25 Mar. (84)	4 Wed.	17	42	30	28 Feb. (59)	0 Sat. .	9884·2849	461·5811	206·9889	4423
25 Mar. (84)	5 Thur.	23	55	0	19 Mar. (78)	6 Fri. .	9918·9245	397·5645	258·2986	4424
26 Mar. (85)	0 Sat. .	6	7	30	8 Mar. (67)	3 Tues.	9794·6078	244·7993	227·4748	4425
25 Mar. (85)	1 Sun. .	12	20	0	26 Feb. (57)	1 Sun. .	8·9231	128·3258	199·3887	4426
25 Mar. (84)	2 Mon. .	18	32	30	16 Mar. (75)	0 Sat. .	43·5628	64·3092	250·6985	4427
26 Mar. (85)	4 Wed.	0	45	0	5 Mar. (64)	4 Wed.	9919·2462	911·5441	219·8746	4428
26 Mar. (85)	5 Thur.	6	57	30	24 Mar. (83)	3 Tues.	9956·8858	847·5276	271·1843	4429
25 Mar. (85)	6 Fri. .	13	10	0	13 Mar. (73)	1 Sun. .	168·3010	731·0530	243·0982	4430
25 Mar. (84)	0 Sat. .	19	22	30	2 Mar. (61)	5 Thur.	43·8845	578·2878	212·2744	4431
26 Mar. (85)	2 Mon. .	1	35	0	21 Mar. (80)	4 Wed.	78·5241	514·2714	263·5841	4432
26 Mar. (85)	3 Tues.	7	47	30	10 Mar. (69)	1 Sun. .	9954·2074	361·5061	232·7602	4433
25 Mar. (85)	4 Wed.	14	0	0	27 Feb. (58)	5 Thur.	9829·8908	208·7409	202·1364	4434
25 Mar. (84)	5 Thur.	20	12	30	17 Mar. (76)	4 Wed.	9864·5305	144·7245	253·2461	4435
26 Mar. (85)	0 Sat. .	2	25	0	7 Mar. (66)	2 Mon. .	78·8457	28·2509	225·1600	4436
26 Mar. (85)	1 Sun. .	8	37	30	26 Mar. (85)	1 Sun. .	113·4853	964·2344	276·4697	4437
25 Mar. (85)	2 Mon. .	14	50	0	14 Mar. (74)	5 Thur.	9989·1687	811·4702	245·6459	4438
25 Mar. (84)	3 Tues.	21	2	30	4 Mar. (63)	3 Tues.	203·4840	694·9967	217·5598	4439
26 Mar. (85)	5 Thur.	3	15	0	23 Mar. (82)	2 Mon. .	238·1236	629·9801	268·8696	4440
26 Mar. (85)	6 Fri. .	9	27	30	12 Mar. (71)	6 Fri. .	113·8081	478·2149	238·0457	4441
25 Mar. (85)	0 Sat. .	15	40	0	29 Feb. (60)	3 Tues.	9989·4904	325·4498	207·2219	4442
25 Mar. (84)	1 Sun .	21	52	30	19 Mar. (78)	2 Mon. .	24·1200	261·4335	259·5315	4443
26 Mar. (85)	3 Tues.	4	5	0	8 Mar. (67)	6 Fri. .	9899·8134	108·6680	227·7077	4444
26 Mar. (85)	4 Wed.	10	17	30	26 Feb. (57)	4 Wed.	114·1286	992·1945	199·6316	4445
25 Mar. (85)	5 Thur.	16	30	0	16 Mar. (76)	3 Tues.	148·7682	928·1780	250·9314	4446

TABLE

CONCURRENT YEAR								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Samvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4447	1268	1403	752	520-21	1345-46	19 Pārthiva .	25 Khara . .	6 Bhādrapada
4448	1269	1404	753	521-22	1346-47	20 Vyaya . .	26 Nandana .	...
4449	1270	1405	754	522-23	1347-48	21 Sarvajit .	27 Vijaya . .	...
4450	1271	1406	755	523-24	*1348-49	22 Sarvadhārin .	28 Jaya . .	4 Āshāḍha .
4451	1272	1407	756	524-25	1349-50	23 Virōdhin .	29 Manmatha .	...
4452	1273	1408	757	525-26	1350-51	24 Vikṛita . ,	30 Durmukha .	...
4453	1274	1409	758	526-27	1351-52	25 Khara . ,	31 Hēmalamba .	2 Vaiśākha .
4454	1275	1410	759	527-28	*1352-53	26 Nandana .	32 Vilamba .	...
4455	1276	1411	760	528-29	1353-54	27 Vijaya . ,	33 Vikārin .	7 Āśvina 11 *Māgha (ksh.)* 12 Phālguna
4456	1277	1412	761	529-30	1354-55	28 Jaya . ,	34 Śārvarin .	...
4457	1278	1413	762	530-31	1355-56	29 Manmatha ,	35 Plava . .	...
4458	1279	1414	763	531-32	*1356-57	30 Durmukha .	36 Śubhakṛit .	5 Śrāvaṇa .
4459	1280	1415	764	532-33	1357-58	31 Hēmalamba .	37 Śōbhana .	...
4460	1281	1416	765	533-34	1358-59	32 Vilamba ,	38 Krōdhin .	...
4461	1282	1417	766	534-35	1359-60	33 Vikārin . .	39 Viśvāvasu .	3 Jyēshṭha .
4462	1283	1418	767	535-36	*1360-61	34 Śārvarin .	40 Parābhava .	...
4463	1284	1419	768	536-37	1361-62	35 Plava . .	41 Plavaṅga .	...
4464	1285	1420	769	537-38	1362-63	36 Śubhakṛit .	42 Kīlaka . .	2 Vaiśākha .
4465	1286	1421	770	538-39	1363-64	37 Śōbhana .	43 Saumya.	...
4466	1287	1422	771	539-40	*1364-65	38 Krōdhin .	44 Sādhāraṇa .	6 Bhādrapada
4467	1288	1423	772	540-41	1365-66	39 Viśvāvasu .	45 Virōdhakṛit .	...
4468	1289	1424	773	541-42	1366-67	40 Parābhava .	46 Paridhāvin .	...
4469	1290	1425	774	542-43	1367-68	41 Plavanga .	47 Pramādin .	4 Āshāḍha .
4470	1291	1426	775	543-44	*1368-69	42 Kīlaka . .	48 Ānanda .	...
4471	1292	1427	776	544-45	1369-70	43 Saumya .	49 Rākshasa .	...

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-saṁkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
25 Mar. (84)	6 Fri. .	22 42 30	5 Mar. (64)	0 Sat. .	24·4516	775·4128	220·1075	4447
26 Mar. (85)	1 Sun. .	4 55 0	24 Mar. (83)	6 Fri. .	59·0912	711·3963	271·4172	4448
26 Mar. (85)	2 Mon.	11 7 30	13 Mar. (72)	3 Tues	9934·7747	558·6312	240·5933	4449
25 Mar. (85)	3 Tues.	17 20 0	1 Mar. (61)	0 Sat. .	9810·4580	405·8660	209·7695	4450
25 Mar. (84)	4 Wed.	23 32 30	20 Mar. (79)	6 Fri. .	9845·0976	341·8494	261·0792	4451
26 Mar. (85)	6 Fri. .	5 45 0	9 Mar. (68)	3 Tues.	9720·7810	189·0843	230·2554	4452
26 Mar. (85)	0 Sat. .	11 57 30	27 Feb. (58)	1 Sun. .	9935·0962	72·6107	202·1693	4453
25 Mar. (85)	1 Sun.	18 10 0	17 Mar. (77)	0 Sat. .	9969·7359	8·5942	253·4790	4454
26 Mar. (85)	3 Tues.	0 22 30	7 Mar. (66)	5 Thur.	184·0511	892·1206	225·3929	4455
26 Mar. (85)	4 Wed.	6 35 0	26 Mar. (85)	4 Wed.	218·6907	828·1042	276·7026	4456
26 Mar. (85)	5 Thur.	12 47 30	15 Mar. (74)	1 Sun. .	94·3741	675·3389	245·8788	4457
25 Mar. (85)	6 Fri. .	19 0 0	3 Mar. (63)	5 Thur.	9970·0575	522·5737	215·4549	4458
26 Mar. (85)	1 Sun. .	1 12 30	22 Mar. (81)	4 Wed.	4·6971	458·5573	266·3647	4459
26 Mar. (85)	2 Mon.	7 25 0	11 Mar. (70)	1 Sun. .	9880·3805	305·7921	235·5408	4460
26 Mar. (85)	3 Tues.	13 37 30	28 Feb. (59)	5 Thur.	9756·0639	153·0269	204·7170	4461
25 Mar. (85)	4 Wed.	19 50 0	18 Mar. (78)	4 Wed.	9790·7035	89·0104	256·0266	4462
26 Mar. (85)	6 Fri. .	2 2 30	8 Mar. (67)	2 Mon. .	5·0188	972·5368	227·9406	4463
26 Mar. (85)	0 Sat. .	8 15 0	26 Feb. (57)	0 Sat. .	219·3338	856·0632	199·8545	4464
26 Mar. (85)	1 Sun. .	14 27 30	17 Mar. (76)	6 Fri. .	253·9737	792·0468	251·1642	4465
25 Mar. (85)	2 Mon. ..	20 40 0	5 Mar. (65)	3 Tues.	129·6571	639·2816	220·3404	4466
26 Mar. (85)	4 Wed.	2 52 30	24 Mar. (83)	2 Mon. .	164·2967	575·2651	271·6501	4467
26 Mar. (85)	5 Thur.	9 5 0	13 Mar. (72)	6 Fri. .	39·9801	422·4999	241·1180	4468
26 Mar. (86)	6 Fri. .	15 17 30	2 Mar. (61)	3 Tues	9915·6635	269·7347	210·0024	4469
25 Mar. (85)	0 Sat. .	21 30 0	20 Mar. (80)	2 Mon. .	9950·3031	205·7182	261·3121	4470
26 Mar. (85)	2 Mon. .	3 42 30	9 Mar. (68)	6 Fri. .	9825·9865	52·9530	230·4883	4471

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Saṁvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4472	1293	1428	777	545-46	1370-71	44 Sādhāraṇa .	50 Ānala . .	3 Jyēshṭha .
4473	1294	1429	778	546-47	1371-72	45 Virōdhakṛit .	51 Piṅgala .	...
4474	1295	1430	779	547-48	*1372-73	46 Paridhāvin .	52 Kālayukta .	6 Bhādrapada
4475	1296	1431	780	548-49	1373-74	47 Pramādin .	53 Siddhārthin .	...
4476	1297	1432	781	549-50	1374-75	48 Ānanda .	54 Raudra .	...
4477	1298	1433	782	550-51	1375-76	49 Rākshasa .	55 Durmati .	5 Śrāvaṇa .
4478	1299	1434	783	551-52	*1376-77	50 Anala . .	56 Dundubhi .	...
4479	1300	1435	784	552-53	1377-78	51 Piṅgala .	57 Rudhirōdgārin	...
4480	1301	1436	785	553-54	1378-79	52 Kālayukta .	58 Raktāksha .	3 Jyēshṭha .
4481	1302	1437	786	554-55	1379-80	53 Siddhārthin .	59 Krōdhana .	...
4482	1303	1438	787	555-56	*1380-81	54 Raudra .	60 Kshaya .	...
4483	1304	1439	788	556-57	1381-82	55 Durmati .	1 Prabhava .	2 Vaiśākha .
4484	1305	1440	789	557-58	1382-83	56 Dundubhi .	2 Vibhava .	...
4485	1306	1441	790	558-59	1383-84	57 Rudhirōdgārin	3 Śukla . .	6 Bhādrapada
4486	1307	1442	791	559-60	*1384-85	58 Raktāksha .	4 Pramōda .	...
4487	1308	1443	792	560-61	1385-86	59 Krōdhana .	5 Prajāpati .	...
4488	1309	1444	793	561-62	1386-87	60 Kshaya .	6 Āṅgirasa .	4 Āshāḍha .
4489	1310	1445	794	562-63	1387-88	1 Prabhava .	7 Śrīmukha .	...
4490	1311	1446	795	563-64	*1388-89	2 Vibhava .	8 Bhāva . .	...
4491	1312	1447	796	564-65	1389-90	3 Śukla . .	9 Yuvan . .	3 Jyēshṭha .
4492	1313	1448	797	565-66	1390-91	4 Pramōda .	10 Dhātṛi . .	...
4493	1314	1449	798	566-67	1391-92	5 Prajāpati .	11 Īśvara . .	7 Āśvina .
4494	1315	1450	799	567-68	*1392-93	6 Āṅgirasa .	12 Bahudhānya .	...
4495	1316	1451	800	568-69	1393-94	7 Śrīmukha .	13 Pramāthin .	...
4496	1317	1452	801	569-70	1394-95	8 Bhāva . .	14 Vikrama .	5 Śrāvaṇa .

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
26 Mar. (85)	3 Tues.	9 55 0	27 Feb. (58)	4 Wed.	40·3017	936 4794	202·4022	4472
26 Mar. (85)	4 Wed.	16 7 30	18 Mar. (77)	3 Tues.	74·9414	872·4630	253·7119	4473
25 Mar. (85)	5 Thur.	22 20 0	7 Mar. (67)	1 Sun. .	289·2566	755 9894	225·6258	4474
26 Mar. (85)	0 Sat. .	4 32 30	25 Mar. (84)	6 Fri. .	9985·2614	655·6813	274·1977	4475
26 Mar. (85)	1 Sun. .	10 45 0	15 Mar. (74)	4 Wed.	199·5796	539 2077	246·1117	4476
26 Mar. (85)	2 Mon.	16 57 30	4 Mar. (63)	1 Sun. .	75·2629	386 4425	215·2878	4477
25 Mar. (85)	3 Tues.	23 10 0	21 Mar. (81)	6 Fri. .	9771·2707	286 1344	263·8598	4478
26 Mar. (85)	5 Thur.	5 22 30	11 Mar. (70)	4 Wed.	9985·5859	169 6608	235·7737	4479
26 Mar. (85)	6 Fri. .	11 35 0	28 Feb. (59)	1 Sun. .	9861·2694	16 8957	204·9499	4480
26 Mar. (85)	0 Sat. .	17 47 30	19 Mar. (78)	0 Sat. .	9895·9080	952·8791	256·2595	4481
26 Mar. (86)	2 Mon. .	0 0 0	8 Mar. (68)	5 Thur.	110·2242	836·4055	228·1735	4482
26 Mar. (85)	3 Tues.	6 12 30	25 Feb. (56)	2 Mon. .	9985·9076	683 6404	197·6414	4483
26 Mar. (85)	4 Wed .	12 25 0	16 Mar. (75)	1 Sun. .	20·5472	619·6238	248·6594	4484
26 Mar. (85)	5 Thur.	18 37 30	5 Mar. (64)	5 Thur.	9896·2306	466·8587	217·8355	4485
26 Mar. (86)	0 Sat. .	0 50 0	23 Mar. (83)	4 Wed.	9930·8702	402·8422	269·1452	4486
26 Mar. (85)	1 Sun. .	7 2 30	12 Mar. (71)	1 Sun. .	9806·5536	250·0770	238·3213	4487
26 Mar. (85)	2 Mon. .	13 15 0	2 Mar. (61)	6 Fri. .	20·8689	133·6034	210·2353	4488
26 Mar. (85)	3 Tues.	19 27 30	21 Mar. (80)	5 Thur.	55·5085	69·5869	261·5430	4489
26 Mar. (86)	5 Thur.	1 40 0	9 Mar. (69)	2 Mon. .	9931·1919	916·8218	230·7212	4490
26 Mar. (85)	6 Fri. .	7 52 30	27 Feb. (58)	0 Sat. .	145·5071	800·3481	202·6351	4491
26 Mar. (85)	0 Sat. .	14 5 0	18 Mar. (77)	6 Fri. .	180·1467	736·0401	251·2070	4492
26 Mar. (85)	1 Sun. .	20 17 30	7 Mar. (66)	3 Tues.	55·8301	583·5665	223·1209	4493
26 Mar. (86)	3 Tues.	2 30 0	25 Mar. (85)	2 Mon.	90·4698	519·5501	274·4306	4494
26 Mar. (85)	4 Wed.	8 42 30	14 Mar. (73)	6 Fri. .	9966·1531	366·7848	243·6068	4495
26 Mar. (85)	5 Thur.	14 55 0	3 Mar. (62)	3 Tues.	9841·8365	214·0196	212·7829	4496

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Saṃvatsara.		Intercalated (*adhika* and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4497	1318	1453	802	570-71	1395-96	9 Yuvan . .	15 Vṛisha . .	...
4498	1319	1454	803	571-72	*1396-97	10 Dhātṛi . .	16 Chitrabhānu .	...
4499	1320	1455	804	572-73	1397-98	11 Īśvara . .	17 Subhānu .	3 Jyēshṭha .
4500	1321	1456	805	573-74	1398-99	12 Bahudhānya .	18 Tāraṇa . .	...
4501	1322	1457	806	574-75	1399-1400	13 Pramāthin .	19 Pārthiva .	8 Kārttika 10 *Pausha* (*ksh.*)
4502	1323	1458	807	575-76	*1400-01	14 Vikrama .	20 Vyaya . .	1 Chaitra .
4503	1324	1459	808	576-77	1401-02	15 Vṛisha . .	21 Sarvajit .	...
4504	1325	1460	809	577-78	1402-03	16 Chitrabhānu .	22 Sarvadhārin .	6 Bhādrapada
4505	1326	1461	810	578-79	1403-04	17 Subhānu .	23 Virōdhin .	...
4506	1327	1462	811	579-80	*1404-05	18 Tāraṇa . .	24 Vikṛita . .	...
4507	1328	1463	812	580-81	1405-06	19 Pārthiva .	25 Khara . .	4 Āshāḍha .
4508	1329	1464	813	581-82	1406-07	20 Vyaya . .	26 Nandana .	...
4509	1330	1465	814	582-83	1407-08	21 Sarvajit .	27 Vijaya . .	...
4510	1331	1466	815	583-84	*1408-09	22 Sarvadhārin .	28 Jaya . .	3 Jyēshṭha .
4511	1332	1467	816	584-85	1409-10	23 Virōdhin .	29 Manmatha .	...
4512	1333	1468	817	585-86	1410-11	24 Vikṛita . .	30 Durmukha .	7 Āśvina .
4513	1334	1469	818	586-87	1411-12	25 Khara . .	31 Hēmalamba .	...
4514	1335	1470	819	587-88	*1412-13	26 Nandana .	32 Vilamba .	...
4515	1336	1471	820	588-89	1413-14	27 Vijaya . .	33 Vikārin . .	4 Āshāḍha .
4516	1337	1472	821	589-90	1414-15	28 Jaya . .	34 Śārvarin .	...
4517	1338	1473	822	590-91	1415-16	29 Manmatha .	35 Plava . .	...
4518	1339	1474	823	591-92	*1416-17	30 Durmukha .	36 Śubhakṛit† .	3 Jyēshṭha .
4519	1340	1475	824	592-93	1417-18	31 Hēmalamba .	38 *Krōdhin* .	...
4520	1341	1476	825	593-94	1418-19	32 Vilamba .	39 *Viśvāvasu* .	8 Kārttika 11 *Māgha* (*ksh.*) 12 Phālguna
4521	1342	1477	826	594-95	1419-20	33 Vikārin .	40 *Parābhava* .	...

† 37 Śōbhana was suppressed in the north.

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-saṁkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
26 Mar. (85)	6 Fri. .	21 7 30	22 Mar. (81)	2 Mon. .	9876·4762	150·0032	264·0927	4497
26 Mar. (86)	1 Sun. .	3 20 0	11 Mar. (71)	0 Sat. .	90·7914	33·5295	236·0066	4498
26 Mar. (85)	2 Mon. .	9 32 30	28 Feb. (59)	4 Wed.	9966·4748	880·7644	205·1827	4499
26 Mar. (85)	3 Tues.	15 45 0	19 Mar. (78)	3 Tues.	1·1144	816·7479	256·4924	4500
26 Mar. (85)	4 Wed.	21 57 30	9 Mar. (68)	1 Sun. .	215·4296	700·2743	228·4064	4501
26 Mar. (86)	6 Fri. .	4 10 0	26 Feb. (57)	5 Thur.	91·1130	547·5092	197·5825	4502
26 Mar. (85)	0 Sat. .	10 22 30	16 Mar. (75)	4 Wed.	125·7526	483·4926	248·8923	4503
26 Mar. (85)	1 Sun. .	16 35 0	5 Mar. (64)	1 Sun. .	1·4360	330 7275	218·0683	4504
26 Mar. (85)	2 Mon.	22 47 30	24 Mar. (83)	0 Sat. .	36·0756	266·7110	269·3781	4505
26 Mar. (86)	4 Wed.	5 0 0	12 Mar. (72)	4 Wed.	9911·7590	113·9457	238·5542	4506
26 Mar. (85)	5 Thur.	11 12 30	2 Mar. (61)	2 Mon. .	126·0743	997·4722	210·4682	4507
26 Mar. (85)	6 Fri. .	17 25 0	21 Mar. (80)	1 Sun. .	160·7139	933·4557	261·7779	4508
26 Mar. (85)	0 Sat. .	23 37 30	10 Mar. (69)	5 Thur.	36·3973	780·6906	230·9541	4509
26 Mar. (86)	2 Mon. .	5 50 0	28 Feb. (59)	3 Tues.	256·7125	664·2169	202·8680	4510
26 Mar. (85)	3 Tues.	12 2 30	17 Mar. (76)	1 Sun. .	9946·7203	563·9089	251·4308	4511
26 Mar. (85)	4 Wed.	18 15 0	6 Mar. (65)	5 Thur.	9822·4037	411·1437	220·6160	4512
27 Mar. (86)	6 Fri. .	0 27 30	25 Mar. (84)	4 Wed.	9857·0433	347·1271	271·9257	4513
26 Mar. (86)	0 Sat. .	6 40 0	13 Mar. (73)	1 Sun. .	9732·7287	194·3620	241·1019	4514
26 Mar. (85)	1 Sun. .	12 52 30	3 Mar. (62)	6 Fri. .	9947·0419	77·8884	213·0161	4515
26 Mar. (85)	2 Mon. .	19 5 0	22 Mar. (81)	5 Thur.	9981·6815	13·8720	264·3256	4516
27 Mar (86)	4 Wed.	1 17 30	12 Mar. (71)	3 Tues.	195·9968	897·3983	236·2394	4517
26 Mar. (86)	5 Thur.	7 30 0	29 Feb. (60)	0 Sat. .	71·6802	744·6332	205·4156	4518
26 Mar. (85)	6 Fri. .	13 42 30	19 Mar. (78)	6 Fri. .	105·3197	680·6167	256·7253	4519
26 Mar. (85)	0 Sat. .	19 55 0	8 Mar. (67)	3 Tues.	9992·0031	527·8514	225·9015	4520
27 Mar. (86)	2 Mon. .	2 7 30	27 Mar. (86)	2 Mon. .	16·6427	363·8350	277·2112	4521

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Samvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4522	1343	1478	827	595-96	*1420-21	34 Śārvarin .	41 *Plavaṅga* .	...
4523	1344	1479	828	596-97	1421-22	35 Plava . .	42 Kīlaka . .	5 Śrāvaṇa .
4524	1345	1480	829	597-98	1422-23	36 Śubhakṛit .	43 Saumya. .	...
4525	1346	1481	830	598-99	1423-24	37 Śōbhana .	44 Sādhāraṇa .	...
4526	1347	1482	831	599-600	*1424-25	38 Krōdhin .	45 Virōdhakrit .	4 Āshāḍha .
4527	1348	1483	832	600-01	1425-26	39 Viśvāvasu .	46 Paridhāvin .	...
4528	1349	1484	833	601-02	1426-27	40 Parābhava .	47 Pramādin .	...
4529	1350	1485	834	602-03	1427-28	41 Plavaṅga .	48 Ānanda .	2 Vaiśākha .
4530	1351	1486	835	603-04	*1428-29	42 Kīlaka .	49 Rākshasa .	...
4531	1352	1487	836	604-05	1429-30	43 Saumya .	50 Anala . .	6 Bhādrapada
4532	1353	1488	837	605-06	1430-31	44 Sādhāraṇa .	51 Piṅgala .	...
4533	1354	1489	838	606-07	1431-32	45 Virōdhakṛit .	52 Kālayukta .	...
4534	1355	1490	839	607-08	*1432-33	46 Paridhāvin .	53 Siddhārthin .	4 Āshāḍha
4535	1356	1491	840	608-09	1433-34	47 Pramādin .	54 Raudra .	...
4536	1357	1492	841	609-10	1434-35	48 Ānanda .	55 Durmati .	...
4537	1358	1493	842	610-11	1435-36	49 Rākshasa .	56 Dundubhi .	3 Jyēshṭha .
4538	1359	1494	843	611-12	*1436-37	50 Anala .	57 Rudhirōdgārin	...
4539	1360	1495	844	612-13	1437-38	51 Piṅgala .	58 Raktāksha .	8 Kārttika .
4540	1361	1496	845	613-14	1438-39	52 Kālayukta .	59 Krōdhana .	...
4541	1362	1497	846	614-15	1439-40	53 Siddhārthin .	60 Kshaya .	...
4542	1363	1498	847	615-16	*1440-41	54 Raudra .	1 Prabhava .	5 Śrāvaṇa .
4543	1364	1499	848	616-17	1441-42	55 Durmati .	2 Vibhava .	...
4544	1365	1500	849	617-18	1442-43	56 Dundubhi .	3 Śukla . .	...
4545	1366	1501	850	618-19	1443-44	57 Rudhirōdgārin	4 Pramōda .	4 Āshāḍha .
4546	1367	1502	851	619-20	*1444-45	58 Raktāksha .	5 Prajāpati .	...

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1, ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-saṁkrānti.	Day and month A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
26 Mar. (86)	3 Tues.	8 20 0	15 Mar. (75)	6 Fri. .	9892·3261	311·0698	246·3894	4522
26 Mar. (85)	4 Wed.	14 32 30	4 Mar. (63)	3 Tues.	9768·0095	157·3046	215·5634	4523
26 Mar. (85)	5 Thur.	20 45 0	23 Mar. (82)	2 Mon. .	9802·6491	94·2881	266·8732	4524
27 Mar. (86)	0 Sat. .	2 57 30	13 Mar. (72)	0 Sat. .	16·9644	977·8145	238·7871	4525
26 Mar. (86)	1 Sun. .	9 10 0	2 Mar. (62)	5 Thur.	231·2797	861·3410	210·7011	4526
26 Mar. (85)	2 Mon.	15 22 30	21 Mar. (80)	4 Wed.	265·9193	796·3244	262·0208	4527
26 Mar. (85)	3 Tues.	21 35 0	10 Mar. (69)	1 Sun. .	141·6027	644·5593	231·1870	4528
27 Mar. (86)	5 Thur.	3 47 30	27 Feb. (58)	5 Thur.	17·2860	491·7941	200 3631	4529
26 Mar. (86)	6 Fri. .	10 0 0	17 Mar. (77)	4 Wed.	51·9257	427·7776	251·6727	4530
26 Mar. (85)	0 Sat. .	16 12 30	6 Mar. (65)	1 Sun. .	9927·6091	275·0124	220·8489	4531
26 Mar. (85)	1 Sun.	22 25 0	25 Mar. (84)	0 Sat. .	9962·2487	210·9959	272·1586	4532
27 Mar. (86)	3 Tues.	4 37 30	14 Mar. (73)	4 Wed.	9837·1321	58·2307	241·3348	4533
26 Mar. (86)	4 Wed.	10 50 0	3 Mar. (63)	2 Mon. .	52·2473	941·7571	213·2487	4534
26 Mar. (85)	5 Thur.	17 2 30	22 Mar. (81)	1 Sun. .	86·8870	877·7407	264·5585	4535
26 Mar. (85)	6 Fri. .	23 15 0	12 Mar. (71)	6 Fri. .	301·2022	761·2671	236·4723	4536
27 Mar. (86)	1 Sun. .	5 27 30	1 Mar. (60)	3 Tues.	176·8856	608·5019	205·6485	4537
26 Mar. (86)	2 Mon. .	11 40 0	18 Mar. (78)	1 Sun. .	9872·8933	508·1938	254·2204	4538
26 Mar. (85)	3 Tues.	17 52 30	8 Mar. (67)	6 Fri. .	87·2086	391·7202	226·1344	4539
27 Mar. (86)	5 Thur.	0 5 0	26 Mar. (85)	4 Wed.	9783·2164	291·4121	274·7063	4540
27 Mar. (86)	6 Fri. .	6 17 30	16 Mar. (75)	2 Mon. .	9997·5316	174·9385	246·6203	4541
26 Mar. (86)	0 Sat. .	12 30 0	4 Mar. (64)	6 Fri. .	9873·2150	22·1734	216·7964	4542
26 Mar. (85)	1 Sun. .	18 42 30	23 Mar. (82)	5 Thur.	9907·8546	958·1569	267·1061	4543
27 Mar. (86)	3 Tues.	0 55 0	13 Mar. (72)	3 Tues.	122·4699	841·6932	239·0200	4544
27 Mar. (86)	4 Wed.	7 7 30	2 Mar. (61)	0 Sat. .	9997·8533	688·9181	208·1962	4545
26 Mar. (86)	5 Thur.	13 20 0	20 Mar. (80)	6 Fri. .	32·4928	624·9016	259·5059	4546

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Saṃvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4547	1368	1503	852	620-21	1445-46	59 Krōdhana .	6 Āṅgiraṣa .	...
4548	1369	1504	853	621-22	1446 47	60 Kshaya .	7 Śrīmukha .	2 Vaiśākha .
4549	1370	1505	854	622-23	1447-48	1 Prabhava .	8 Bhāva . .	...
4550	1371	1506	855	623-24	*1448-49	2 Vibhava .	9 Yuvan . .	6 Bhādrapada
4551	1372	1507	856	624-25	1449-50	3 Śukla . .	10 Dhāṭri . .	...
4552	1373	1508	857	625-26	1450-51	4 Pramōda .	11 Īśvara . .	...
4553	1374	1509	858	626-27	1451-52	5 Prajāpati .	12 Bahudhānya .	4 Āshāḍha
4554	1375	1510	859	627-28	*1452-53	6 Āṅgirasa .	13 Pramāthin .	...
4555	1376	1511	860	628-29	1453-54	7 Śrīmukha .	14 Vikrama .	...
4556	1377	1512	861	629-30	1454-55	8 Bhāva . .	15 Vṛisha . .	3 Jyēshṭha .
4557	1378	1513	862	630-31	1455-56	9 Yuvan . .	16 Chitrabhānu .	...
4558	1379	1514	863	631-32	*1456-57	10 Dhāṭri . .	17 Subhānu	8 Kārttika 10 *Pauṣha* (*kṣh*) 12 Phālguna
4559	1380	1515	864	632-33	1457-58	11 Īśvara . .	18 Tarāṇa .	...
4560	1381	1516	865	633-34	1458-59	12 Bahudhānya .	19 Pārthiva .	...
4561	1382	1517	866	634 35	1459-60	13 Pramāthin .	20 Vyaya . .	5 Śrāvaṇa .
4562	1383	1518	867	635-36	*1460-61	14 Vikrama .	21 Sarvajit .	...
4563	1384	1519	868	636 37	1461-62	15 Vṛisha . .	22 Sarvadhārin .	...
4564	1385	1520	869	637-38	1462-63	16 Chitrabhānu .	23 Virōdhin .	4 Āshādha .
4565	1386	1521	870	638-39	1463-64	17 Subhānu .	24 Vikṛita . .	...
4566	1387	1522	871	639 40	*1464-65	18 Tāraṇa . .	25 Khara . .	...
4567	1388	1523	872	640-41	1465-66	19 Pārthiva .	26 Ṇandaṇa .	2 Vaiśākha .
4568	1389	1524	873	641-42	1466-67	20 Vyaya . .	27 Vijaya . .	...
4569	1390	1525	874	642-43	1467-68	21 Sarvajit .	28 Jaya . .	6 Bhādrapada
4570	1391	1526	875	643-44	*1468-69	22 Sarvadhārin .	29 Manmatha .	...
4571	1392	1527	876	644-45	1469-70	23 Virōdhin .	30 Durmukha .	...

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.				LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-saṁkrānti.		Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17		19	20	23	24	25	1
		H. M. S.							
26 Mar. (85)	6 Fri. .	19 32 30		9 Mar. (68)	3 Tues.	9908·1762	472·1363	228·6821	4547
27 Mar. (86)	1 Sun. .	1 45 0		26 Feb. (57)	0 Sat. .	9784·8596	319·3712	197·8582	4548
27 Mar. (86)	2 Mon. .	7 57 30		17 Mar. (76)	6 Fri. .	9818·4993	255·3547	249·1679	4549
26 Mar. (86)	3 Tues.	14 10 0		6 Mar. (66)	4 Wed.	32·8145	138 8812	221·0818	4550
26 Mar. (85)	4 Wed.	20 22 30		25 Mar. (84)	3 Tues.	67·4541	74·8646	272·3915	4551
27 Mar. (86)	6 Fri. .	2 35 0		14 Mar. (73)	0 Sat. .	9943·1375	922·0995	241·5677	4552
27 Mar. (86)	0 Sat. .	8 47 30		4 Mar. (63)	5 Thur.	157·4527	805·6259	213·4816	4553
26 Mar. (86)	1 Sun. .	15 0 0		22 Mar. (82)	4 Wed.	192·0924	741·6094	264·7914	4554
26 Mar. (85)	2 Mon. .	21 12 30		11 Mar. (70)	1 Sun. .	67·7757	588·8442	233·9674	4555
27 Mar. (86)	4 Wed.	3 25 0		28 Feb. (59)	5 Thur.	9943·4591	436·0790	203·1436	4556
27 Mar. (86)	5 Thur.	9 37 30		19 Mar. (78)	4 Wed.	9978·0987	372 0625	254·4533	4557
26 Mar. (86)	6 Fri. .	15 50 0		7 Mar. (67)	1 Sun. .	9853·7821	219·2973	223·6295	4558
26 Mar. (85)	0 Sat. .	22 2 30		26 Mar. (85)	0 Sat. .	9888·4218	155·2809	274·9392	4559
27 Mar. (86)	2 Mon.	4 15 0		16 Mar. (75)	5 Thur.	102·7370	38·8073	246·8532	4560
27 Mar. (86)	3 Tues.	10 27 30		5 Mar. (64)	2 Mon. .	9978·4204	885·0421	216·0293	4561
26 Mar. (86)	4 Wed.	16 40 0		23 Mar. (83)	1 Sun. .	13·0600	822·0256	267·3390	4562
26 Mar. (85)	5 Thur.	22 52 30		13 Mar. (72)	6 Fri. .	227·3753	705·5520	239·2529	4563
27 Mar. (86)	0 Sat. .	5 5 0		2 Mar. (61)	3 Tues.	103·0587	552·7868	208·4291	4564
27 Mar. (86)	1 Sun. .	11 17 30		21 Mar. (80)	2 Mon. .	137·6983	488·7703	259·7388	4565
26 Mar. (86)	2 Mon. .	17 30 0		9 Mar. (69)	6 Fri. .	13·3817	336·0051	228 9150	4566
26 Mar. (85)	3 Tues.	23 42 30		26 Feb. (57)	3 Tues.	9889·0651	183·2400	198·0911	4567
27 Mar. (86)	5 Thur.	5 55 0		17 Mar. (76)	2 Mon. .	9923·7047	119·2214	249·4008	4568
27 Mar. (86)	6 Fri. .	12 7 30		7 Mar. (66)	0 Sat. .	138·0199	2·7499	221·3147	4569
26 Mar. (86)	0 Sat. .	18 20 0		25 Mar. (85)	6 Fri. .	172·6596	938·7334	272·6244	4570
27 Mar. (86)	2 Mon. .	0 32 30		14 Mar. (73)	3 Tues.	48·3430	785·9682	241·8006	4571

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Saṁvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4572	1393	1528	877	645-46	1470-71	24 Vikṛita . .	31 Hēmalamba .	4 Āshāḍha .
4573	1394	1529	878	646-47	1471-72	25 Khara . .	32 Vilamba .	...
4574	1395	1530	879	647-48	*1472-73	26 Nandana .	33 Vikārin . .	...
4575	1396	1531	880	648-49	1473-74	27 Vijaya . .	34 Śārvarin .	3 Jyēshṭha .
4576	1397	1532	881	649-50	1474-75	28 Jaya . .	35 Plava . .	...
4577	1398	1533	882	650-51	1475-76	29 Manmatha .	36 Śubhakṛit	7 Āśvina 10 *Pausha* (*ksh.*) 12 Phālguna
4578	1399	1534	883	651-52	*1476-77	30 Durmukha .	37 Śōbhana .	...
4579	1400	1535	884	652-53	1477-78	31 Hēmalamba .	38 Krōdhin .	...
4580	1401	1536	885	653-54	1478-79	32 Vilamba .	39 Viśvāvasu .	5 Śrāvaṇa .
4581	1402	1537	886	654-55	1479-80	33 Vikārin . .	40 Parābhava .	...
4582	1403	1538	887	655-56	*1480-81	34 Śārvarin .	41 Plavaṅga .	...
4583	1404	1539	888	656-57	1481-82	35 Plava . .	42 Kīlaka . .	4 Āshāḍha .
4584	1405	1540	889	657-58	1482-83	36 Śubhakṛit .	43 Saumya .	...
4585	1406	1541	890	658-59	1483-84	37 Śōbhana .	44 Sādhāraṇa .	...
4586	1407	1542	891	659-60	*1484-85	38 Krōdhin .	45 Virōdhakṛit .	1 Chaitra .
4587	1408	1543	892	660-61	1485-86	39 Viśvāvasu .	46 Paridhāvin .	...
4588	1409	1544	893	661-62	1486-87	40 Parābhava .	47 Pramādin .	6 Bhādrapada
4589	1410	1545	894	662-63	1487-88	41 Plavaṅga .	48 Ānanda .	...
4590	1411	1546	895	663-64	*1488-89	42 Kīlaka . .	49 Rākshasa .	...
4591	1412	1547	896	664-65	1489-90	43 Saumya .	50 Anala . .	4 Āshāḍha .
4592	1413	1548	897	665-66	1490-91	44 Sādhāraṇa .	51 Piṅgala .	...
4593	1414	1549	898	666-67	1491-92	45 Virōdhakṛit .	52 Kālayukta .	...
4594	1415	1550	899	667-68	*1492-93	46 Paridhāvin .	53 Siddhārthin .	2 Vaiśākha .
4595	1416	1551	900	668-69	1493-94	47 Pramādin .	54 Raudra .	...
4596	1417	1552	901	669-70	1494-95	48 Ānanda .	55 Durmati .	6 Bhādrapada

LXI—*Contd.*

COMMENCEMENT OF THE								Kali.
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					
Day and month, A.D.	Week-day.	Time of true Mēsha-saṁkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
27 Mar. (86)	3 Tues.	6 45 0	4 Mar. (63)	1 Sun. .	262·6582	669·4946	213·7145	4572
27 Mar. (86)	4 Wed.	12 57 30	22 Mar. (81)	6 Fri. .	9958·6660	569·1865	262·2865	4573
26 Mar. (86)	5 Thur.	19 10 0	10 Mar. (70)	3 Tues.	9838·3494	416·4214	231·4626	4574
27 Mar. (86)	0 Sat. .	1 22 30	28 Feb. (59)	1 Sun. .	48·6646	299·9477	203·3765	4575
27 Mar. (86)	1 Sun. .	7 35 0	18 Mar. (77)	6 Fri. .	9744·6724	199·6397	251·9484	4576
27 Mar. (86)	2 Mon. .	13 47 30	8 Mar. (67)	4 Wed.	9958·9875	83·1661·	223·8624	4577
26 Mar. (86)	3 Tues.	20 0 0	26 Mar. (86)	3 Tues.	9993·6272	19·1496	275·1721	4578
27 Mar. (86)	5 Thur.	2 12 30	16 Mar. (75)	1 Sun. .	207·9424	902·6760	247·0861	4579
27 Mar. (86)	6 Fri. .	8 25 0	5 Mar. (64)	5 Thur.	83·6259	749·9109	216·2622	4580
27 Mar. (86)	0 Sat. .	14 37 30	24 Mar. (83)	4 Wed.	118·2654	685·8943	267·5720	4581
26 Mar. (86)	1 Sun. .	20 50 0	12 Mar. (72)	1 Sun. .	9993·9488	533·1291	236·7480	4582
27 Mar. (86)	3 Tues.	3 2 30	1 Mar. (60)	5 Thur.	9869·6322	380·3640	205·9242	4583
27 Mar. (86)	4 Wed.	9 15 0	20 Mar. (79)	4 Wed.	9904·2718	316·3474	257·2339	4584
27 Mar. (86)	5 Thur.	15 27 30	9 Mar. (68)	1 Sun. .	9779·9552	163·5822	226·4101	4585
26 Mar. (86)	6 Fri. .	21 40 0	27 Feb. (58)	6 Fri. .	9994·2705	47·1087	198·3239	4586
27 Mar. (86)	1 Sun. .	3 52 30	17 Mar. (76)	5 Thur.	28·9101	983·0922	249·6337	4587
27 Mar. (86)	2 Mon. .	10 5 0	7 Mar. (66)	3 Tues.	243·2253	866·6186	221·5476	4588
27 Mar. (86)	3 Tues.	16 17 30	26 Mar. (85)	2 Mon. .	277·8650	802·6021	272·8573	4589
26 Mar. (86)	4 Wed.	22 30 0	14 Mar. (74)	6 Fri. .	153·5484	649·8370	242·0335	4590
27 Mar. (86)	6 Fri. .	4 42 30	3 Mar. (62)	3 Tues.	29·2318	497·0717	211·2097	4591
27 Mar. (86)	0 Sat. .	10 55 0	22 Mar. (81)	2 Mon. .	63·8714	433·0553	262·5194	4592
27 Mar. (86)	1 Sun. .	17 7 30	11 Mar. (70)	6 Fri. .	9939·5548	280·2901	231·6955	4593
26 Mar. (86)	2 Mon. .	23 20 0	28 Feb. (59)	3 Tues.	9815·2381	127·5249	200·8716	4594
27 Mar. (86)	4 Wed.	5 32 30	18 Mar. (77)	2 Mon. .	9849·8778	63·5084	252·1813	4595
27 Mar. (86)	5 Thur.	11 45 0	8 Mar. (67)	0 Sat. .	64·1930	947·0348	224·0953	4596

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Saṁvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4597	1418	1553	902	670-71	1495-96	49 Rākshasa .	56 Dundubhi .	...
4598	1419	1554	903	671-72	*1496-97	50 Anala . .	57 Rudhirōdgārin	...
4599	1420	1555	904	672-73	1497-98	51 Piṅgala .	58 Raktāksha .	5 Śrāvaṇa .
4600	1421	1556	905	673-74	1498-99	52 Kālayukta .	59 Krōdhaṇa .	...
4601	1422	1557	906	674-75	1499-1500	53 Siddhārthin .	60 Kshaya .	...
4602	1423	1558	907	675-76	*1500-01	54 Raudra .	1 Prabhava .	3 Jyēshṭha .
4603	1424	1559	908	676-77	1501-02	55 Durmati .	2 Vibhava† .	...
4604	1425	1560	909	677-78	1502-03	56 Dundubhi .	4 *Pramōda* .	...
4605	1426	1561	910	678-79	1503-04	57 Rudhirōdgārin	5 *Prajāpati* .	2 Vaiśākha .
4606	1427	1562	911	679-80	*1504-05	58 Raktāksha .	6 *Āṅgirasa* .	...
4607	1428	1563	912	680-81	1505-06	59 Krōdhana .	7 *Śrīmukha* .	6 Bhādrapada
4608	1429	1564	913	681-82	1506-07	60 Kshaya .	8 *Bhāva* . .	...
4609	1430	1565	914	682-83	1507-08	1 Prabhava .	9 *Yuvan* . .	...
4610	1431	1566	915	683-84	*1508-09	2 Vibhava .	10 *Dhātṛi* . .	4 Āshāḍha .
4611	1432	1567	916	684-85	1509-10	3 Śukla . .	11 *Īśvara* . .	...
4612	1433	1568	917	685-86	1510-11	4 Pramōda .	12 *Bahudhānya* .	...
4613	1434	1569	918	686-87	1511-12	5 Prajāpati .	13 *Pramāthin* .	2 Vaiśākha .
4614	1435	1570	919	687-88	*1512-13	6 Āṅgirasa .	14 *Vikrama* .	...
4615	1436	1571	920	688-89	1513-14	7 Śrīmukha .	15 *Vṛisha* . .	6 Bhādrapada
4616	1437	1572	921	689-90	1514-15	8 Bhāva . .	16 *Chitrabhānu* .	...
4617	1438	1573	922	690-91	1515-16	9 Yuvan . .	17 Subhānu .	...
4618	1439	1574	923	691-92	*1516-17	10 Dhātṛi . .	18 Tāraṇa . .	5 Śrāvaṇa .
4619	1440	1575	924	692-93	1517-18	11 Īśvara . .	19 Pārthiva .	...
4620	1441	1576	925	693-94	1518-19	12 Bahudhānya .	20 Vyaya . .	...
4621	1442	1577	926	694-95	1519-20	13 Pramāthin .	21 Sarvajit .	3 Jyēshṭha .

† No. 3 Śukla was suppressed in the north.

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF DAY ON WHICH CHAITRA ŚUKLA 1 ENDED).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-saṁkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
27 Mar. (86)	6 Fri. .	17 57 30	27 Mar. (86)	6 Fri. .	98·8327	883·0184	275·4050	4597
27 Mar. (87)	1 Sun. .	0 10 0	16 Mar. (76)	4 Wed.	313·1479	766·5447	247·3190	4598
27 Mar. (86)	2 Mon. .	6 22 30	5 Mar. (64)	1 Sun. .	188·8313	613·7796	216 4950	4599
27 Mar. (86)	3 Tues.	12 35 0	23 Mar. (82)	6 Fri. .	9884·8390	513·4715	265·0670	4600
27 Mar. (86)	4 Wed.	18 47 30	12 Mar. (71)	3 Tues.	9760·5224	360·7063	234·2431	4601
27 Mar. (87)	6 Fri. .	1 0 0	1 Mar. (61)	1 Sun. .	9974·8377	244·2328	206·1571	4602
27 Mar. (86)	0 Sat. .	7 12 30	20 Mar. (79)	0 Sat. .	9·4773	180·2162	257·4668	4603
27 Mar. (86)	1 Sun. .	13 25 0	9 Mar. (68)	4 Wed.	9885·1607	27·4510	226 6429	4604
27 Mar. (86)	2 Mon. .	19 37 30	27 Feb. (58)	2 Mon. .	99·4760	910·9775	198·5568	4605
27 Mar. (87)	4 Wed.	1 50 0	17 Mar. (77)	1 Sun. .	134·1156	846·9609	249·8666	4606
27 Mar. (86)	5 Thur.	8 2 30	6 Mar. (65)	5 Thur.	9·7990	694·1958	219·0427	4607
27 Mar. (86)	6 Fri. .	14 15 0	25 Mar. (84)	4 Wed.	44·4386	630·1793	270·3525	4608
27 Mar. (86)	0 Sat. .	20 27 30	14 Mar. (73)	1 Sun. .	9920·1220	477·4141	239·5286	4609
27 Mar. (87)	2 Mon. .	2 40 0	2 Mar. (62)	5 Thur.	9795·8054	324·6489	208·7048	4610
27 Mar. (86)	3 Tues.	8 52 30	21 Mar. (80)	4 Wed.	9830·4450	260·6324	260·0144	4611
27 Mar. (86)	4 Wed.	15 5 0	11 Mar. (70)	2 Mon. .	44·7603	144·1589	231·9284	4612
27 Mar. (86)	5 Thur.	21 17 30	28 Feb. (59)	6 Fri. .	9920·4426	991·3936	201·1045	4613
27 Mar. (87)	0 Sat. .	3 30 0	18 Mar. (78)	5 Thur.	9955·0933	927·3772	252·4142	4614
27 Mar. (86)	1 Sun. .	9 42 30	8 Mar. (67)	3 Tues.	169·3984	810·9036	224·3282	4615
27 Mar. (86)	2 Mon. .	15 55 0	27 Mar. (86)	2 Mon. .	202·0381	746·8872	275·6379	4616
27 Mar. (86)	3 Tues.	22 7 30	16 Mar. (75)	6 Fri. .	79·7215	594·1219	244·8140	4617
27 Mar. (87)	5 Thur.	4 20 0	4 Mar. (64)	3 Tues.	9955·4049	441·3567	213·9901	4618
27 Mar. (86)	6 Fri. .	10 32 30	23 Mar. (82)	2 Mon. .	9990·0445	377·3403	265·2999	4619
27 Mar. (86)	0 Sat. .	16 45 0	12 Mar. (71)	6 Fri. .	9865·7278	224·5750	234·4760	4620
27 Mar. (86)	1 Sun. .	22 57 30	2 Mar. (61)	4 Wed.	80·0431	108·1015	206·3800	4621

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	JOVIAN SAṂVATSARA. Southern system.	JOVIAN SAṂVATSARA. Northern system.	INTERCALATED (*adhika*) and SUPPRESSED (*kshaya*) LUNAR MONTHS (true).
1	2	3	3*a*	4	5	6	7	8
4622	1443	1578	927	695-96	*1520-21	14 Vikrama .	22 Sarvadhārin .	...
4623	1444	1579	928	696-97	1521-22	15 Vṛisha . .	23 Virōdhin .	...
4624	1445	1580	929	697-98	1522-23	16 Chitrabhānu .	24 Vikṛita .	2 Vaiśākha .
4625	1446	1581	930	698-99	1523-24	17 Subhānu .	25 Khara . .	...
4626	1447	1582	931	699-700	*1524-25	18 Tāraṇa . .	26 Nandana .	6 Bhādrapada
4627	1448	1583	932	700-01	1525-26	19 Pārthiva .	27 Vijaya . .	...
4628	1449	1584	933	701-02	1526-27	20 Vyaya . .	28 Jaya . .	...
4629	1450	1585	934	702-03	1527-28	21 Sarvajit .	29 Manmatha .	4 Āshāḍha .
4630	1451	1586	935	703-04	*1528-29	22 Sarvadhārin .	30 Durmukha .	...
4631	1452	1587	936	704-05	1529-30	23 Virōdhin .	31 Hēmalamba .	...
4632	1453	1588	937	705-06	1530-31	24 Vikṛita . .	32 Vilamba .	2 Vaiśākha .
4633	1454	1589	938	706-07	1531-32	25 Khara . .	33 Vikārin . .	...
4634	1455	1590	939	707-08	*1532-33	26 Nandana .	34 Śārvarin .	6 Bhādrapada
4635	1456	1591	940	708-09	1533-34	27 Vijaya . .	35 Plava . .	...
4636	1457	1592	941	709-10	1534-35	28 Jaya . .	36 Śubhakṛit .	...
4637	1458	1593	942	710-11	1535-36	29 Manmatha .	37 Śōbhana .	5 Śrāvaṇa .
4638	1459	1594	943	711-12	*1536-37	30 Durmukha .	38 Krōdhin .	...
4639	1460	1595	944	712-13	1537-38	31 Hēmalamba .	39 Viśvāvasu .	...
4640	1461	1596	945	713-14	1538-39	32 Vilamba .	40 Parābhava .	3 Jyēshṭha .
4641	1462	1597	946	714-15	1539-40	33 Vikārin . .	41 Plavaṅga .	...
4642	1463	1598	947	715-16	*1540-41	34 Śārvarin .	42 Kīlaka .	7 Āśvina* / 10 *Pausha* (*ksh.*)
4643	1464	1599	948	716-17	1541-42	35 Plava . .	43 Saumya .	1 Chaitra .
4644	1465	1600	949	717-18	1542-43	36 Śubhakṛit .	44 Sādhāraṇa .	...
4645	1466	1601	950	718-19	1543-44	37 Śōbhana .	45 Virōdhakṛit .	6 Bhādrapada
4646	1467	1602	951	719-20	*1544-45	38 Krōdhin .	46 Paridhāvin .	...

* A close case. At the Tulā-saṁkrānti the moon had been waxing for less than 2 minutes.

LXI—*Contd.*

COMMENCEMENT OF THE										Kali.
SOLAR YEAR.					LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.			Day and month, A.D.	Week-day.	*a*.	*b*.	*c*.	
13	14	17			19	20	23	24	25	1
		H.	M.	S.						
27 Mar. (87)	3 Tues.	5	10	0	20 Mar. (80)	3 Tues.	114·6827	44·0850	257·6997	4622
27 Mar. (86)	4 Wed.	11	22	30	9 Mar. (68)	0 Sat. .	9990·3661	891·3198	226·8758	4623
27 Mar. (86)	5 Thur.	17	35	0	27 Feb. (58)	5 Thur.	204·6814	774·8462	198·7897	4624
27 Mar. (86)	6 Fri. .	23	47	30	18 Mar. (77)	4 Wed.	239·3210	710·8297	250·0995	4625
27 Mar. (87)	1 Sun. .	6	0	0	6 Mar. (66)	1 Sun. .	115·0044	558·0646	219·2756	4626
27 Mar. (86)	2 Mon. .	12	12	30	25 Mar. (84)	0 Sat. .	149·6440	494·0480	270·5854	4627
27 Mar. (86)	3 Tues.	18	25	0	14 Mar. (73)	4 Wed.	25·3274	341·2828	239·7615	4628
28 Mar. (87)	5 Thur.	0	37	30	3 Mar. (62)	1 Sun. .	9901·0108	188·5177	208·9577	4629
27 Mar. (87)	6 Fri. .	6	50	0	21 Mar. (81)	0 Sat. .	9935·6504	124·5011	160·2473	4630
27 Mar. (86)	0 Sat. .	13	2	30	11 Mar. (70)	5 Thur.	149·9657	8·0276	232·1613	4631
27 Mar. (86)	1 Sun. .	19	15	0	28 Feb. (59)	2 Mon. .	25·6490	855·2624	201·3374	4632
28 Mar. (87)	3 Tues.	1	27	30	19 Mar. (78)	1 Sun. .	60·2887	791·2459	252·6471	4633
27 Mar. (87)	4 Wed.	7	40	0	8 Mar. (68)	6 Fri. .	274·6009	674·7723	224·5641	4634
27 Mar. (86)	5 Thur.	13	52	30	26 Mar. (85)	4 Wed.	9970·6117	574·4642	273·1330	4635
27 Mar. (86)	6 Fri. .	20	5	0	15 Mar. (74)	1 Sun. .	9846·2851	421·6991	242·3091	4636
28 Mar. (87)	1 Sun. .	2	17	30	4 Mar. (63)	5 Thur.	9721·9785	268·9338	211·4853	4637
27 Mar. (87)	2 Mon. .	8	30	0	22 Mar. (82)	4 Wed.	9756·6181	204·9174	262·7950	4638
27 Mar. (86)	3 Tues.	14	42	30	12 Mar. (71)	2 Mon. .	9970·9333	88·4438	234·7089	4639
27 Mar. (86)	4 Wed.	20	55	0	2 Mar. (61)	0 Sat. .	185·2486	971·8702	206·6229	4640
28 Mar. (87)	6 Fri. .	3	7	30	21 Mar. (80)	6 Fri. .	219·8882	907·9537	257·9326	4641
27 Mar. (87)	0 Sat. .	9	20	0	9 Mar. (69)	3 Tues.	95·5716	755·1885	227·1088	4642
27 Mar. (86)	1 Sun. .	15	32	30	26 Feb. (57)	0 Sat. .	9971·2550	602·4234	196·2848	4643
27 Mar. (86)	2 Mon. .	21	45	0	17 Mar. (76)	6 Fri. .	5·8946	538·4068	247·5946	4644
28 Mar. (87)	4 Wed.	3	57	30	6 Mar. (65)	3 Tues.	9881·5780	385·6417	216·7707	4645
27 Mar. (87)	5 Thur.	10	10	0	24 Mar. (84)	2 Mon. .	9916·2175	321·6252	268·0805	4646

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Saṁvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4647	1468	1603	952	720-21	1545-46	39 Viśvāvasu .	47 Pramādin .	...
4648	1469	1604	953	721-22	1546-47	40 Parābhava .	48 Ānanda .	4 Āshādha .
4649	1470	1605	954	722-23	1547-48	41 Plavaṅga .	49 Rākshasa .	...
4650	1471	1606	955	723-24	*1548-49	42 Kīlaka . .	50 Anala . .	...
4651	1472	1607	956	724-25	1549-50	43 Saumya .	51 Piṅgala .	2 Vaiśākha .
4652	1473	1608	957	725-26	1550-51	44 Sādhāraṇa .	52 Kālayukta .	...
4653	1474	1609	958	726-27	1551-52	45 Virōdhakṛit .	53 Siddhārthin .	6 Bhādrapada
4654	1475	1610	959	727-28	*1552-53	46 Paridhāvin .	54 Raudra .	...
4655	1476	1611	960	728-29	1553-54	47 Pramādin .	55 Durmati .	...
4656	1477	1612	961	729-30	1554-55	48 Ānanda .	56 Dundubhi .	4 Āshāḍha .
4657	1478	1613	962	730-31	1555-56	49 Rākshasa .	57 Rudhirōdgārin	...
4658	1479	1614	963	731-32	*1556-57	50 Anala . .	58 Raktāksha .	...
4659	1480	1615	964	732-33	1557-58	51 Piṅgala .	59 Krōdhana .	3 Jyēshṭha .
4660	1481	1616	965	733-34	1558-59	52 Kālayukta .	60 Kshaya .	...
4661	1482	1617	966	734-35	1559-60	53 Siddhārthin .	1 Prabhava .	8 Kārttika 11 *Māgha* (*ksh.*) 12 Phālguna
4662	1483	1618	967	735-36	*1560-61	54 Raudra .	2 Vibhava .	...
4663	1484	1619	968	736-37	1561-62	55 Durmati .	3 Śukla . .	...
4664	1485	1620	969	737-38	1562-63	56 Dundubhi .	4 Pramōda .	5 Śrāvaṇa .
4665	1486	1621	970	738-39	1563-64	57 Rudhirōdgārin	5 Prajāpati .	...
4666	1487	1622	971	739-40	*1564-65	58 Raktāksha .	6 Āṅgirasa .	...
4667	1488	1623	972	740-41	1565-66	59 Krōdhana .	7 Śrīmukha .	4 Āshāḍha .
4668	1489	1624	973	741-42	1566-67	60 Kshaya .	8 Bhāva .	...
4669	1490	1625	974	742-43	1567-68	1 Prabhava .	9 Yuvan . .	...
4670	1491	1626	975	743-44	*1568-69	2 Vibhava .	10 Dhātṛi . .	2 Vaiśākha .
4671	1492	1627	976	744-45	1569-70	3 Śukla . .	11 Īśvara . .	...

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
27 Mar. (86)	6 Fri. .	16 22 30	13 Mar. (72)	6 Fri. .	9791·9009	168·8599	237·2566	4647
27 Mar. (86)	0 Sat. .	22 35 0	3 Mar. (62)	4 Wed.	6·2162	52·3864	209·1706	4648
28 Mar. (87)	2 Mon. .	4 47 30	22 Mar. (81)	3 Tues.	40·9559	988·3699	260·4802	4649
27 Mar. (87)	3 Tues. .	11 0 0	11 Mar. (71)	1 Sun.	255·1711	871·8964	232·3942	4650
27 Mar. (86)	4 Wed.	17 12 30	28 Feb. (59)	5 Thur.	130·8544	719·1311	201·5703	4651
27 Mar. (86)	5 Thur.	23 25 0	19 Mar. (78)	4 Wed.	165·4941	655·1147	252·8800	4652
28 Mar. (87)	0 Sat. .	5 37 30	8 Mar. (67)	1 Sun. .	41·1774	502·3495	222·0562	4653
27 Mar. (87)	1 Sun. .	11 50 0	26 Mar. (86)	0 Sat. .	75·8171	438·3329	273·3659	4654
27 Mar. (86)	2 Mon. .	18 2 30	15 Mar. (74)	4 Wed.	9952·5005	285·5678	242·5420	4655
28 Mar. (87)	4 Wed.	0 15 0	4 Mar. (63)	1 Sun. .	9827·1839	132·8021	211·7182	4656
28 Mar. (87)	5 Thur.	6 27 30	23 Mar. (82)	0 Sat. .	9861·8235	68·7856	263·0279	4657
27 Mar. (87)	6 Fri. .	12 40 0	12 Mar. (72)	5 Thur.	76·1387	952·3120	234·9418	4658
27 Mar. (86)	0 Sat. .	18 52 30	2 Mar. (61)	3 Tues.	290·4540	835·8385	206·8558	4659
28 Mar. (87)	2 Mon. .	1 5 0	21 Mar. (80)	2 Mon. .	325·0936	760·8220	258·1655	4660
28 Mar. (87)	3 Tues.	7 17 30	10 Mar. (69)	6 Fri. .	200·7771	619·0567	227·3417	4661
27 Mar. (87)	4 Wed.	13 30 0	27 Mar. (87)	4 Wed.	9896·7848	518·7487	275·9135	4662
27 Mar. (86)	5 Thur.	19 42 30	16 Mar. (75)	1 Sun. .	9772·4681	365·9835	245·0897	4663
28 Mar. (87)	0 Sat. .	1 55 0	6 Mar. (65)	6 Fri. .	9986·7834	249·5104	217·0036	4664
28 Mar. (87)	1 Sun. .	8 7 30	25 Mar. (84)	5 Thur.	21·4230	185·4939	268·3134	4665
27 Mar. (87)	2 Mon. .	14 20 0	13 Mar. (73)	2 Mon.	9897·1064	32·7287	237·4895	4666
27 Mar. (86)	3 Tues.	20 32 30	3 Mar. (62)	0 Sat. .	111·4197	916·2552	209·4035	4667
28 Mar. (87)	5 Thur.	2 45 0	22 Mar. (81)	6 Fri. .	146·0613	852·2386	260·7131	4668
28 Mar. (87)	6 Fri. .	8 57 30	11 Mar. (70)	3 Tues.	21·7447	699·4735	229·8883	4669
27 Mar. (87)	0 Sat. .	15 10 0	28 Feb. (59)	0 Sat. .	9897·4281	546·7083	199·0654	4670
27 Mar. (86)	1 Sun. .	21 22 30	18 Mar. (77)	6 Fri .	9932·0677	482·6917	250·3752	4671

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Saṁvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4672	1493	1628	977	745-46	1570-71	4 Pramōda .	12 Bahudhānya .	6 Bhādrapada
4673	1494	1629	978	746-47	1571-72	5 Prajāpati .	13 Pramāthin .	...
4674	1495	1630	979	747-48	*1572-73	6 Āngirasa .	14 Vikrama .	...
4675	1496	1631	980	748-49	1573-74	7 Śrīmukha .	15 Vṛisha . .	4 Āshāḍha .
4676	1497	1632	981	749-50	1574-75	8 Bhāva . .	16 Chitrabhānu .	...
4677	1498	1633	982	750-51	1575-76	9 Yuvan . .	17 Subhānu .	...
4678	1499	1634	983	751-52	*1576-77	10 Dhātṛi . .	18 Tāraṇa . .	3 Jyēshṭha .
4679	1500	1635	984	752-53	1577-78	11 Īśvara . .	19 Pārthiva .	...
4680	1501	1636	985	753-54	1578-79	12 Bahudhānya .	20 Vyaya . .	8 Kārttika .
4681	1502	1637	986	754-55	1579-80	13 Pramāthin .	21 Sarvajit .	...
4682	1503	1638	987	755-56	*1580-81	14 Vikrama .	22 Sarvadhārin .	...
4683	1504	1639	988	756-57	1581-82	15 Vṛisha . .	23 Virōdhin .	5 Śrāvaṇa .
4684	1505	1640	989	757-58	1582-83	16 Chitrabhānu .	24 Vikṛita . .	...
4685	1506	1641	990	758-59	1583-84	17 Subhānu .	25 Khara . .	...
4686	1507	1642	991	759-60	*1584-85	18 Tāraṇa . .	26 Nandana .	4 Āshādha .
4687	1508	1643	992	760-61	1585-86	19 Pārthiva .	27 Vijaya . .	...
4688	1509	1644	993	761-62	1586-87	20 Vyaya . .	28 Jaya . .	...
4689	1510	1645	994	762-63	1587-88	21 Sarvajit .	29 Manmatha† .	2 Vaiśākha .
4690	1511	1646	995	763-64	*1588-89	22 Sarvadhārin .	31 *Hēmalamba* .	...
4691	1512	1647	996	764-65	1589 90	23 Virōdhin .	32 *Vilamba* .	6 Bhādrapada
4692	1513	1648	997	765-66	1590-91	24 Vikṛita . .	33 *Vikārin* .	...
4693	1514	1649	998	766-67	1591-92	25 Khara . .	34 *Śārvarin* .	...
4694	1515	1650	999	767-68	*1592-93	26 Nandana .	35 *Plava* . .	4 Āshādha .
4695	1516	1651	1000	768-69	1593-94	27 Vijaya . .	36 *Śubhakṛit* .	...
4696	1517	1652	1001	769-70	1594-95	28 Jaya . .	37 *Śōbhana* .	...

† No. 30, Durmati, was suppressed in the north.

LXI—*Contd.*

COMMENCEMENT OF THE								Kali.
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF DAY ON WHICH CHAITRA ŚUKLA 1 ENDED).					
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
28 Mar. (87)	3 Tues.	3 35 0	7 Mar. (66)	3 Tues.	9807·7511	330·2366	219·5513	4672
28 Mar. (87)	4 Wed.	9 47 30	26 Mar. (85)	2 Mon. .	9842·3907	265·9101	270·8611	4673
27 Mar (87)	5 Thur.	16 0 0	15 Mar. (75)	0 Sat. .	56·7060	149·4366	242·7749	4674
27 Mar. (86)	6 Fri. .	22 12 30	4 Mar. (63)	4 Wed.	9932·3894	996·6713	211·9511	4675
28 Mar. (87)	1 Sun. .	4 25 0	23 Mar. (82)	3 Tues.	9967·0290	932·6549	263·2608	4676
28 Mar. (87)	2 Mon. .	10 37 30	13 Mar. (72)	1 Sun. .	181·3441	816·1813	235·1747	4677
27 Mar. (87)	3 Tues.	16 50 0	1 Mar. (61)	5 Thur.	57·0275	663·4160	204·3509	4678
27 Mar. (86)	4 Wed.	23 2 30	20 Mar. (79)	4 Wed.	91·6671	599·3996	255·9524	4679
28 Mar. (87)	6 Fri. .	5 15 0	9 Mar. (68)	1 Sun. .	9967·3506	446·6344	224·8368	4680
28 Mar. (87)	0 Sat. .	11 27 30	28 Mar. (87)	0 Sat. .	1·9902	382·6179	276·1464	4681
27 Mar. (87)	1 Sun. .	17 40 0	16 Mar. (76)	4 Wed.	9877·6735	229·8527	245·3226	4682
27 Mar. (86)	2 Mon. .	23 52 30	6 Mar. (65)	2 Mon. .	91·9888	113·3791	217·2365	4683
28 Mar. (87)	4 Wed.	6 5 0	25 Mar. (84)	1 Sun. .	126·6284	49·3626	268·5463	4684
28 Mar. (87)	5 Thur.	12 17 30	14 Mar. (73)	5 Thur.	2·3118	896·5974	237·7224	4685
27 Mar. (87)	6 Fri.	18 30 0	3 Mar. (63)	3 Tues.	216·6271	780·1239	209·6363	4686
28 Mar. (87)	1 Sun. .	0 42 30	22 Mar. (81)	2 Mon. .	251·2667	716·1074	260·9460	4687
28 Mar. (87)	2 Mon. .	6 55 0	11 Mar. (70)	6 Fri. .	126·9501	563·3422	230·1222	4688
28 Mar. (87)	3 Tues.	13 7 30	28 Feb. (59)	3 Tues.	2·6335	410·5770	199·2983	4689
27 Mar. (87)	4 Wed.	19 20 0	18 Mar. (78)	2 Mon. .	37·2731	346·5605	250·6081	4690
28 Mar. (87)	6 Fri. .	1 32 30	7 Mar. (66)	6 Fri. .	9912·9565	193·7953	219·7842	4691
28 Mar. (87)	0 Sat. .	7 45 0	26 Mar. (85)	5 Thur.	9947·5961	129·7788	271·0939	4692
28 Mar. (87)	1 Sun. .	13 57 30	16 Mar. (75)	3 Tues.	161·9114	13·2053	243·0078	4693
27 Mar. (87)	2 Mon. .	20 10 0	4 Mar. (64)	0 Sat. .	37·5948	860·5401	212·1840	4694
28 Mar. (87)	4 Wed.	2 22 30	23 Mar. (82)	6 Fri. .	72·2344	796·5236	263·4937	4695
28 Mar (87)	5 Thur.	8 35 0	13 Mar. (72)	4 Wed.	286·5496	680·0500	235·4076	4696

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Samvatsara. Southern system.	Jovian Samvatsara. Northern system.	Intercalated (*adhika*) and suppressed (*kshaya*) lunar months (true).
1	2	3	3*a*	4	5	6	7	8
4697	1518	1653	1002	770-71	1595-96	29 Manmatha .	38 *Krōdhin* .	3 Jyēshṭha .
4698	1519	1654	1003	771-72	*1596-97	30 Durmukha .	39 *Viśvāvasu* .	...
4699	1520	1655	1004	772-73	1597-98	31 Hēmalamba .	40 *Parābhava* .	8 Kārttika .
4700	1521	1656	1005	773-74	1598-99	32 Vilamba .	41 *Plavaṅga* .	...
4701	1522	1657	1006	774-75	1599-1600	33 Vikārin . .	42 *Kīlaka* . .	...
4702	1523	1658	1007	775-76	*1600-01	34 Śārvarin .	43 *Saumya* .	5 Śrāvaṇa .
4703	1524	1659	1008	776-77	1601-02	35 Plava . .	44 Sādhāraṇa .	...
4704	1525	1660	1009	777-78	1602-03	36 Śubhakṛit .	45 Virōdhakṛit .	...
4705	1526	1661	1010	778-79	1603-04	37 Śōbhana .	46 Paridhāvin .	4 Āshāḍha .
4706	1527	1662	1011	779-80	*1604-05	38 Krōdhin .	47 Pramādin .	...
4707	1528	1663	1012	780-81	1605-06	39 Viśvāvasu .	48 Ānanda .	...
4708	1529	1664	1013	781-82	1606-07	40 Parābhava .	49 Rākshasa .	1 Chaitra .
4709	1530	1665	1014	782-83	1607-08	41 Plavaṅga .	50 Anala . .	...
4710	1531	1666	1015	783-84	*1608-09	42 Kīlaka . .	51 Piṅgala .	6 Bhādrapada
4711	1532	1667	1016	784-85	1609-10	43 Saumya .	52 Kālayukta .	...
4712	1533	1668	1017	785-86	1610-11	44 Sādhāraṇa .	53 Siddhārthin .	...
4713	1534	1669	1018	786-87	1611-12	45 Virōdhakṛit .	54 Raudra .	4 Āshāḍha .
4714	1535	1670	1019	787-88	*1612-13	46 Paridhāvin .	55 Durmati .	...
4715	1536	1671	1020	788-89	1613-14	47 Pramādin .	56 Dundubhi .	...
4716	1537	1672	1021	789-90	1614-15	48 Ānanda .	57 Rudhirōdgārin	3 Jyēshṭha .
4717	1538	1673	1022	790-91	1615-16	49 Rākshasa .	58 Raktākṣha .	...
4718	1539	1674	1023	791-92	*1616-17	50 Anala . .	59 Krōdhana .	7 Āśvina .
4719	1540	1675	1024	792-93	1617-18	51 Piṅgala .	60 Kshaya .	...
4720	1541	1676	1025	793-94	1618-19	52 Kālayukta .	1 Prabhava .	...
4721	1542	1677	1026	794-95	1619-20	53 Siddhārthin .	2 Vibhava .	5 Śrāvaṇa .

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.				LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-saṁkrānti.		Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17		19	20	23	24	25	1
		H. M. S.							
28 Mar. (87)	6 Fri. .	14 47 30		2 Mar. (61)	1 Sun. .	162·2330	527·2848	204·5838	4697
27 Mar. (87)	0 Sat. .	21 0 0		19 Mar. (79)	6 Fri. .	9858·2408	426·9767	253·1557	4698
28 Mar. (87)	2 Mon. .	3 12 30		8 Mar. (67)	3 Tues.	9733·9241	274·2115	222·3318	4699
28 Mar. (87)	3 Tues.	9 25 0		27 Mar. (86)	2 Mon. .	9768·5638	210·1951	273·6415	4700
28 Mar. (87)	4 Wed.	15 37 30		17 Mar. (76)	0 Sat. .	9982·8789	93·7214	245·5555	4701
27 Mar. (87)	5 Thur.	21 50 0		6 Mar. (66)	5 Thur.	197·1942	977·2479	218·4694	4702
28 Mar. (87)	0 Sat. .	4 2 30		25 Mar. (84)	4 Wed.	231·8338	913·2313	268·7792	4703
28 Mar. (87)	1 Sun. .	10 15 0		14 Mar. (73)	1 Sun. .	107·5172	760·4661	237·9552	4704
28 Mar. (87)	2 Mon. .	16 27 30		3 Mar. (62)	5 Thur.	9983·2006	607·7010	207·1314	4705
27 Mar. (87)	3 Tues.	22 40 0		21 Mar. (81)	4 Wed.	17·8402	543·6844	258·4411	4706
28 Mar. (87)	5 Thur.	4 52 30		10 Mar. (69)	1 Sun. .	9893·5236	390·9192	227·6173	4707
28 Mar. (87)	6 Fri. .	11 5 0		27 Feb. (58)	5 Thur.	9769·2070	238·1541	196·7934	4708
28 Mar. (87)	0 Sat. .	17 17 30		18 Mar. (77)	4 Wed.	9803·8466	174·1376	248·1032	4709
27 Mar. (87)	1 Sun. .	23 30 0		7 Mar. (67)	2 Mon. .	18·1619	57·6640	220·0171	4710
28 Mar. (87)	3 Tues.	5 42 30		26 Mar. (85)	1 Sun. .	52·8015	993·6475	271·3267	4711
28 Mar. (87)	4 Wed.	11 55 0		16 Mar. (75)	6 Fri. .	267·1178	877·1740	243·2407	4712
28 Mar. (87)	5 Thur.	18 7 30		5 Mar. (64)	3 Tues.	142·8002	724·4087	212·4169	4713
28 Mar. (88)	0 Sat. .	0 20 0		23 Mar. (83)	2 Mon. .	177·4398	660·3923	263·7266	4714
28 Mar. (87)	1 Sun. .	6 32 30		12 Mar. (71)	6 Fri. .	53·1233	507·6271	232·9028	4715
28 Mar. (87)	2 Mon. .	12 45 0		1 Mar. (60)	3 Tues.	9928·8064	354·8619	202·0789	4716
28 Mar. (87)	3 Tues.	18 57 30		20 Mar. (79)	2 Mon. .	9962·4462	290·8454	253·3885	4717
28 Mar. (88)	5 Thur.	1 10 0		8 Mar. (68)	6 Fri. .	9839·1305	138·0802	222·5647	4718
28 Mar. (87)	6 Fri. .	7 22 30		27 Mar. (86)	5 Thur.	9874·7691	74·0637	273·8744	4719
28 Mar. (87)	0 Sat. .	13 35 0		17 Mar. (76)	3 Tues.	88·0843	957·5901	245·7884	4720
28 Mar. (87)	1 Sun. .	19 47 30		7 Mar. (66)	1 Sun. .	302·3996	841·1165	217·7023	4721

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Samvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4722	1543	1678	1027	795-96	*1620-21	54 Raudra .	3 Śukla . .	...
4723	1544	1679	1028	796-97	1621-22	55 Durmati .	4 Pramōda .	...
4724	1545	1680	1029	797-98	1622-23	56 Dundubhi .	5 Prajāpati .	4 Āshādha .
4725	1546	1681	1030	798-99	1623-24	57 Rudhirōdgārin	6 Āṅgirasa .	...
4726	1547	1682	1031	799 800	*1624-25	58 Raktāksha .	7 Śrīmukha .	...
4727	1548	1683	1032	800-01	1625-26	59 Krōdhana .	8 Bhāva . .	1 Chaitra .
4728	1549	1684	1033	801-02	1626-27	60 Kshaya .	9 Yuvan . .	...
4729	1550	1685	1034	802-03	1627-28	1 Prabhava .	10 Dhātṛi . .	5 Śrāvaṇa .
4730	1551	1686	1035	803-04	*1628-29	2 Vibhava .	11 Īśvara . .	...
4731	1552	1687	1036	804-05	1629-30	3 Śukla . .	12 Bahudhānya .	...
4732	1553	1688	1037	805-06	1630-31	4 Pramōda .	13 Pramāthin .	4 Āshāḍha .
4733	1554	1689	1038	806-07	1631-32	5 Prajāpati .	14 Vikrama .	...
4734	1555	1690	1039	807-08	*1632-33	6 Āṅgirasa .	15 Vṛisha . .	...
4735	1556	1691	1040	808-09	1633-34	7 Śrīmukha .	16 Chitrabhānu .	2 Vaiśākha .
4736	1557	1692	1041	809-10	1634-35	8 Bhāva . .	17 Subhānu .	...
4737	1558	1693	1042	810-11	1635-36	9 Yuvan . .	18 Tāraṇa . .	6 Bhādrapada
4738	1559	1694	1043	811-12	*1636-37	10 Dhātṛi . .	19 Pārthiva .	...
4739	1560	1695	1044	812-13	1637-38	11 Īśvara . .	20 Vyaya . .	...
4740	1561	1696	1045	813-14	1638-39	12 Bahudhānya .	21 Sarvajit. .	5 Śrāvaṇa .
4741	1562	1697	1046	814 15	1639-40	13 Pramāthin .	22 Sarvadhārin .	...
4742	1563	1698	1047	815-16	*1640-41	14 Vikrama .	23 Virōdhin .	...
4743	1564	1699	1048	816-17	1641-42	15 Vṛisha . .	24 Vikṛita . .	3 Jyēshṭha .
4744	1565	1700	1049	817-18	1642-43	16 Chitrabhānu .	25 Khara . .	...
4745	1566	1701	1050	818-19	1643-44	17 Subhānu .	26 Nandana .	...
4746	1567	1702	1051	819-20	*1644-45	18 Tāraṇa . .	27 Vijaya . .	1 Chaitra .

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M. S.						
28 Mar. (88)	3 Tues.	2 0 0	24 Mar. (84)	6 Fri. .	9998·4073	740·8085	266·2743	4722
28 Mar. (87)	4 Wed.	8 12 30	14 Mar. (73)	4 Wed.	212·7226	624·3349	238·1881	4723
28 Mar. (87)	5 Thur.	14 25 0	3 Mar. (62)	1 Sun. .	88·4060	471·5697	207·3643	4724
28 Mar. (87)	6 Fri. .	20 37 30	21 Mar. (80)	6 Fri. .	9784·4137	371·2616	255·9362	4725
28 Mar. (88)	1 Sun. .	2 50 0	10 Mar. (70)	4 Wed.	9998·7290	254·7880	227·8502	4726
28 Mar. (87)	2 Mon. .	9 2 30	27 Feb (58)	1 Sun. .	9874·4124	102·0228	197·0263	4727
28 Mar. (87)	3 Tues.	15 15 0	18 Mar. (77)	0 Sat. .	9909·0520	38·0063	248·3361	4728
28 Mar. (87)	4 Wed.	21 27 30	8 Mar. (67)	5 Thur.	123·3673	921·5328	220·2500	4729
28 Mar. (88)	6 Fri. .	3 40 0	26 Mar. (86)	4 Wed.	158·0079	857·5162	271·4596	4730
28 Mar. (87)	0 Sat. .	9 52 30	15 Mar. (74)	1 Sun. .	33·6902	704·7511	240·7358	4731
28 Mar. (87)	1 Sun. .	16 5 0	4 Mar. (63)	5 Thur.	9909·3737	551·9859	209 9120	4732
28 Mar. (87)	2 Mon. .	22 17 30	23 Mar. (82)	4 Wed.	9944·0133	487·9693	261·2217	4733
28 Mar. (88)	4 Wed.	4 30 0	11 Mar. (71)	1 Sun. .	9819·6967	335·2042	230 3979	4734
28 Mar. (87)	5 Thur.	10 42 30	1 Mar. (60)	6 Fri. .	34·0119	218·7306	202·3118	4735
28 Mar. (87)	6 Fri. .	16 55 0	20 Mar. (79)	5 Thur.	68·6516	154·7141	253·1575	4736
28 Mar. (87)	0 Sat. .	23 7 30	9 Mar. (68)	2 Mon. .	9944·3349	1·9489	222·7976	4737
28 Mar. (88)	2 Mon. .	5 20 0	27 Mar. (87)	1 Sun. .	9978·9746	937·9325	274·1073	4738
28 Mar. (87)	3 Tues.	11 32 30	17 Mar. (76)	6 Fri. .	193·2898	821·4589	246·0213	4739
28 Mar. (87)	4 Wed.	17 45 0	6 Mar. (65)	3 Tues.	68·9732	668·6936	215·1974	4740
28 Mar. (87)	5 Thur.	23 57 30	25 Mar. (84)	2 Mon. .	103·6128	604·6772	266·5072	4741
28 Mar. (88)	0 Sat. .	6 10 0	13 Mar. (73)	6 Fri. .	9979·2962	451·9120	235·6833	4742
28 Mar. (87)	1 Sun. .	12 22 30	2 Mar. (61)	3 Tues.	9854·9796	299·1468	204·8594	4743
28 Mar. (87)	2 Mon. .	18 35 0	21 Mar. (80)	2 Mon. .	9890·6192	235·1303	256·1691	4744
29 Mar (88)	4 Wed.	0 47 30	10 Mar. (69)	6 Fri. .	9765·3026	82·3651	225·3453	4745
28 Mar. (88)	5 Thur.	7 0 0	28 Feb. (59)	4 Wed.	9979·6178	965·8916	197·2592	4746

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Saṃvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4747	1568	1703	1052	820-21	1645-46	19 Pārthiva .	28 Jaya . .	...
4748	1569	1704	1053	821-22	1646-47	20 Vyaya . .	29 Manmatha .	5 Śrāvaṇa .
4749	1570	1705	1054	822-23	1647-48	21 Sarvajit .	30 Durmukha .	...
4750	1571	1706	1055	823-24	*1648-49	22 Sarvadhārin .	31 Hēmalamba .	...
4751	1572	1707	1056	824-25	1649-50	23 Virōdhin .	32 Vilamba .	4 Āshāḍha .
4752	1573	1708	1057	825-26	1650-51	24 Vikṛita . .	33 Vikārin . .	...
4753	1574	1709	1058	826-27	1651-52	25 Khara . .	34 Śārvarin .	...
4754	1575	1710	1059	827-28	*1652-53	26 Nandana .	35 Plava . .	2 Vaiśākha .
4755	1576	1711	1060	828-29	1653-54	27 Vijaya . .	36 Śubhakṛit .	...
4756	1577	1712	1061	829-30	1654-55	28 Jaya . .	37 Śōbhana .	6 Bhādrapada
4757	1578	1713	1062	830-31	1655-56	29 Manmatha .	38 Krōdhin .	...
4758	1579	1714	1063	831-32	*1656-57	30 Durmukha .	39 Viśvāvasu .	...
4759	1580	1715	1064	832-33	1657-58	31 Hēmalamba .	40 Parābhava .	5 Śrāvaṇa .
4760	1581	1716	1065	833-34	1658-59	32 Vilamba .	41 Plavaṅga .	...
4761	1582	1717	1066	834-35	1659-60	33 Vikārin . .	42 Kīlaka . .	...
4762	1583	1718	1067	835-36	*1660-61	34 Śārvarin .	43 Saumya .	3 Jyēshṭha .
4763	1584	1719	1068	836-37	1661-62	35 Plava . .	44 Sādhāraṇa .	...
4764	1585	1720	1069	837-38	1662-63	36 Śubhakṛit .	45 Virōdhakṛit .	...
4765	1586	1721	1070	838-39	1663-64	37 Śobhana .	46 Paridhāvin .	1 Chaitra .
4766	1587	1722	1071	839-40	*1664-65	38 Krōdhin .	47 Pramādhin .	...
4767	1588	1723	1072	840-41	1665-66	39 Viśvāvasu .	48 Ānanda .	5 Śrāvaṇa .
4768	1589	1724	1073	841-42	1666-67	40 Parābhava .	49 Rākshasa .	...
4769	1590	1725	1074	842-43	1667-68	41 Plavaṅga .	50 Anala . .	...
4770	1591	1726	1075	843-44	*1668-69	42 Kīlaka . .	51 Piṅgala .	4 Āshāḍha .
4771	1592	1727	1076	844-45	1669-70	43 Saumya .	52 Kālayukta .	...

LXI—*Contd.*

COMMENCEMENT OF THE									Kali.
SOLAR YEAR.				LUNI-SOLAR YEAR (MEAN SUNRISE OF DAY ON WHICH CHAITRA ŚUKLA 1 ENDED).					
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.		Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17		19	20	23	24	25	1
		H. M. S.							
28 Mar. (87)	6 Fri. .	13 12 30		18 Mar. (77)	3 Tues.	14·2674	901·8750	248·4690	4747
28 Mar. (87)	0 Sat .	19 25 0		8 Mar. (67)	1 Sun. .	229·5727	785·4015	220·4829	4748
29 Mar. (88)	2 Mon. .	1 37 30		27 Mar. (86)	0 Sat. .	263·2124	720·3850	271·7925	4749
28 Mar. (88)	3 Tues.	7 50 0		15 Mar. (75)	4 Wed.	138·8957	568·6198	240·9687	4750
28 Mar. (87)	4 Wed.	14 2 30		4 Mar. (63)	1 Sun. .	14·5791	415·8546	210·1449	4751
28 Mar. (87)	5 Thur.	20 15 0		23 Mar. (82)	0 Sat. .	49·2187	351·8381	261·4546	4752
29 Mar. (88)	0 Sat. .	2 27 30		12 Mar. (71)	4 Wed.	9924·9021	199·0730	230·6308	4753
28 Mar. (88)	1 Sun. .	8 40 0		29 Feb. (60)	1 Sun. .	9800·5855	46·3077	199·8269	4754
28 Mar. (87)	2 Mon. .	14 52 30		20 Mar. (79)	1 Sun .	173·8570	18·5828	254·8044	4755
28 Mar. (87)	3 Tues.	21 5 0		9 Mar. (68)	5 Thur.	49·5403	865·8177	223 0305	4756
29 Mar. (88)	5 Thur.	3 17 30		28 Mar. (87)	4 Wed.	84·1800	801·8012	274 3402	4757
28 Mar. (88)	6 Fri. .	9 30 0		17 Mar. (77)	2 Mon. .	298·4953	685·3276	246·2542	4758
28 Mar. (87)	0 Sat. .	15 42 30		6 Mar. (65)	6 Fri. .	174·7786	532 5624	215·4303	4759
28 Mar. (87)	1 Sun. .	21 55 0		24 Mar. (83)	4 Wed.	9870·7864	432·2544	264·0023	4760
29 Mar. (88)	3 Tues.	4 7 30		13 Mar. (72)	1 Sun. .	9746·4697	279·4893	233·1784	4761
28 Mar. (88)	4 Wed.	10 20 0		2 Mar. (62)	6 Fri. .	9960·7850	163·0155	205·0743	4762
28 Mar. (87)	5 Thur.	16 32 30		21 Mar. (80)	5 Thur.	9995·4246	98·9991	256·4020	4763
28 Mar. (87)	6 Fri. .	22 45 0		10 Mar. (69)	2 Mon. .	9871·1080	946·2338	225·5782	4764
29 Mar. (88)	1 Sun. .	4 57 30		28 Feb (59)	0 Sat. .	84·8233	829·7603	197·4921	4765
28 Mar. (88)	2 Mon. .	11 10 0		18 Mar. (78)	6 Fri. .	119·4629	765·8038	248·8019	4766
28 Mar. (87)	3 Tues.	17 22 30		7 Mar. (66)	3 Tues.	9996·1463	612·9787	217·9780	4767
28 Mar. (87)	4 Wed.	23 35 0		26 Mar. (85)	2 Mon. .	29·7859	548·9621	259·2877	4768
29 Mar. (88)	6 Fri. .	5 47 30		15 Mar. (74)	6 Fri. .	9905·4693	396·1969	238·4628	4769
28 Mar. (88)	0 Sat. .	12 0 0		3 Mar. (63)	3 Tues.	9781·1527	243·4318	207·6400	4770
28 Mar. (87)	1 Sun. .	18 12 30		22 Mar. (81)	2 Mon. .	9815·7923	179·4152	258·9497	4771

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Samvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4772	1593	1728	1077	845-46	1670-71	44 Sādhāraṇa .	53 Siddhārthin .	...
4773	1594	1729	1078	846-47	1671-72	45 Virōdhakṛit .	54 Raudra .	2 Vaiśākha .
4774	1595	1730	1079	847-48	*1672-73	46 Paridhāvin .	55 Durmati† .	...
4775	1596	1731	1080	848-49	1673-74	47 Pramādin .	57 *Rudhirōdgārin*	6 Bhādrapada
4776	1597	1732	1081	849-50	1674-75	48 Ānanda .	58 *Rak ākṣha* .	...
4777	1598	1733	1082	850-51	1675-76	49 Rākshasa .	59 *Krōdhana* .	...
4778	1599	1734	1083	851-52	*1676-77	50 Anala .	60 *Kshaya* . .	5 Śrāvaṇa .
4779	1600	1735	1084	852-53	1677-78	51 Pingala .	1 *Prabhava* .	...
4780	1601	1736	1085	853-54	1678-79	52 Kālayukta .	2 *Vibhava* .	...
4781	1602	1737	1086	854-55	1679-80	53 Siddhārthin .	3 *Śukla* . .	3 Jyēshṭha .
4782	1603	1738	1087	855-56	*1680-81	54 Raudra .	4 *Pramōda* .	...
4783	1604	1739	1088	856-57	1681-82	55 Durmati .	5 *Prajāpati*	7 Āśvina 10 *Pausha* (*ksh.*)
4784	1605	1740	1089	857-58	1682-83	56 Dundubhi .	6 *Aṅgirasa* .	1 Chaitra
4785	1606	1741	1090	858-59	1683-84	57 Rudhirōdgārin	7 *Śrīmukha* .	...
4786	1607	1742	1091	859-60	*1684-85	58 Raktāksha .	8 *Bhāva* . .	5 Śrāvaṇa .
4787	1608	1743	1092	860-61	1685-86	59 Krōdhana .	9 *Yuvan* . .	...
4788	1609	1744	1093	861-62	1686-87	60 Kshaya .	10 Dhātṛi . .	...
4789	1610	1745	1094	862-63	1687-88	1 Prabhava .	11 Īśvara . .	4 Āshāḍha .
4790	1611	1746	1095	863-64	*1688-89	2 Vibhava .	12 Bahudhānya .	...
4791	1612	1747	1096	864-65	1689-90	3 Śukla .	13 Pramāthin .	...
4792	1613	1748	1097	865-66	1690-91	4 Pramōda .	14 Vikrama .	2 Vaiśākha .
4793	1614	1749	1098	866-67	1691-92	5 Prajāpati .	15 Vṛisha . .	...
4794	1615	1750	1099	867-68	*1692-93	6 Āṅgirasa .	16 Chitrabhānu .	6 Bhādrapada
4795	1616	1751	1100	868-69	1693-94	7 Śrīmukha .	17 Subhānu .	...
4796	1617	1752	1101	869-70	1694-95	8 Bhāva .	18 Tāraṇa . .	...

† No. 56 Dundubhi was suppressed in the north.

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.				LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.		Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17		19	20	23	24	25	1
		H. M. S.							
29 Mar. (88)	3 Tues.	0 25 0		12 Mar. (71)	0 Sat. .	30·1076	62·9417	230·8637	4772
29 Mar. (88)	4 Wed.	6 37 30		1 Mar. (60)	4 Wed.	9905·7910	910·1765	200·0398	4773
28 Mar. (88)	5 Thur.	12 50 0		20 Mar. (80)	4 Wed.	279·0625	882·4516	254·0873	4774
28 Mar. (87)	6 Fri. .	19 2 30		9 Mar. (68)	1 Sun. .	154·7458	729·6864	223·2634	4775
29 Mar. (88)	1 Sun. .	1 15 0		28 Mar. (87)	0 Sat. .	189·3855	665·6700	274·5731	4776
29 Mar. (88)	2 Mon. .	7 27 30		17 Mar. (76)	4 Wed.	65·0688	512·9048	253·7493	4777
28 Mar. (88)	3 Tues.	13 40 0		5 Mar. (65)	1 Sun. .	9940·7522	360·1395	212·9255	4778
28 Mar. (87)	4 Wed.	19 52 30		24 Mar. (83)	0 Sat. .	9975·3918	296·1231	264·2352	4779
29 Mar. (88)	6 Fri. .	2 5 0		13 Mar. (72)	4 Wed.	9851·0752	143·3579	233·4113	4780
29 Mar. (88)	0 Sat. .	8 17 30		3 Mar. (62)	2 Mon. .	65·3904	26·8842	205·3252	4781
28 Mar. (88)	1 Sun. .	14 30 0		21 Mar. (81)	1 Sun. .	100·0300	962·8678	256·6349	4782
28 Mar. (87)	2 Mon. .	20 42 30		10 Mar. (69)	5 Thur.	9975·7134	810·1026	225·8111	4783
29 Mar. (88)	4 Wed.	2 55 0		28 Feb. (59)	3 Tues.	190·0287	693·6290	197·7250	4784
29 Mar. (88)	5 Thur.	9 7 30		19 Mar. (78)	2 Mon. .	224·6683	629·6125	249·0348	4785
28 Mar. (88)	6 Fri. .	15 20 0		7 Mar. (67)	6 Fri. .	100·3517	476·8474	218·2108	4786
28 Mar. (87)	0 Sat. .	21 32 30		25 Mar. (84)	4 Wed.	9796·3594	376·5391	266·7828	4787
29 Mar. (88)	2 Mon. .	3 45 0		15 Mar. (74)	2 Mon. .	10·6747	260·0656	238·6967	4788
29 Mar (88)	3 Tues.	9 57 30		4 Mar. (63)	6 Fri. .	9886·3581	107·3005	207·8729	4789
28 Mar. (88)	4 Wed.	16 10 0		22 Mar. (82)	5 Thur.	9920·9977	43·2840	259·1826	4790
28 Mar. (87)	5 Thur.	22 22 30		12 Mar (71)	3 Tues.	135·3130	926·8104	231·0966	4791
29 Mar. (88)	0 Sat. .	4 35 0		1 Mar. (60)	0 Sat. .	10·9963	774·0452	200·2727	4792
29 Mar. (88)	1 Sun. .	10 47 30		20 Mar. (79)	6 Fri. .	45·6360	710·0287	251·5824	4793
28 Mar. (88)	2 Mon. .	17 0 0		8 Mar. (68)	3 Tues.	9921·3194	557·2636	220·7585	4794
28 Mar. (87)	3 Tues.	23 12 30		27 Mar. (86)	2 Mon. .	9955·9590	493·2471	272·0682	4795
29 Mar. (88)	5 Thur.	5 25 0		16 Mar. (75)	6 Fri. .	9831·6424	340·4819	241·2444	4796

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Samvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4797	1618	1753	1102	870-71	1695-96	9 Yuvan .	19 Pārthiva .	4 Āshāḍha .
4798	1619	1754	1103	871-72	*1696-97	10 Dhātṛi .	20 Vyaya . .	...
4799	1620	1755	1104	872-73	1697-98	11 Īśvara .	21 Sarvajit .	...
4800	1621	1756	1105	873-74	1698-99	12 Bahudhānya .	22 Sarvadhārin .	3 Jyēshṭha .
4801	1622	1757	1106	874-75	1699-1700	13 Pramāthin .	23 Virōdhin .	...
4802	1623	1758	1107	875-76	*1700-01	14 Vikrama .	24 Vikṛita .	7 Āśvina 11 *Magha* (*ksh.*)
4803	1624	1759	1108	876-77	1701-02	15 Vṛisha .	25 Khara . .	1 Chaitra .
4804	1625	1760	1109	877-78	1702-03	16 Chitrabhānu	26 Nandana .	...
4805	1626	1761	1110	878-79	1703-04	17 Subhānu .	27 Vijaya . .	5 Śrāvaṇa .
4806	1627	1762	1111	879-80	*1704-05	18 Tāraṇa .	28 Jaya . .	...
4807	1628	1763	1112	880-81	1705-06	19 Pārthiva .	29 Manmatha .	...
4808	1629	1764	1113	881-82	1706-07	20 Vyaya .	30 Durmukha .	4 Āshāḍha .
4809	1630	1765	1114	882-83	1707-08	21 Sarvajit .	31 Hēmalamba .	...
4810	1631	1766	1115	883-84	*1708-09	22 Sarvadhārin .	32 Vilamba .	...
4811	1632	1767	1116	884-85	1709-10	23 Virōdhin .	33 Vikārin .	2 Vaiśākha .
4812	1633	1768	1117	885-86	1710-11	24 Vikṛita .	34 Śārvarin .	...
4813	1634	1769	1118	886-87	1711-12	25 Khara .	35 Plava . .	6 Bhādrapada
4814	1635	1770	1119	887-88	*1712-13	26 Nandana .	36 Śubhakṛit .	...
4815	1636	1771	1120	888-89	1713-14	27 Vijaya .	37 Śōbhana .	...
4816	1637	1772	1121	889-90	1714-15	28 Jaya . .	38 Krōdhin .	4 Āshādha .
4817	1638	1773	1122	890-91	1715-16	29 Manmatha .	39 Viśvāvasu .	...
4818	1639	1774	1123	891-92	*1716-17	30 Durmukha .	40 Parābhava .	...
4819	1640	1775	1124	892-93	1717-18	31 Hēmalamba .	41 Plavaṅga .	3 Jyēshṭha .
4820	1641	1776	1125	893-94	1718-19	32 Vilamba .	42 Kilaka . .	...
4821	1642	1777	1126	894-95	1719-20	33 Vikārin .	43 Saumya. .	7 Āśvina .

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.				LUNI-SOLAR YEAR (MEAN SUNRISE OF CIVIL DAY ON WHICH CHAITRA ŚUKLA 1 ENDS).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-saṁkrānti.		Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17		19	20	23	24	25	1
		H. M. S.							
29 Mar. (88)	6 Fri. .	11 37 30		6 Mar. (65)	4 Wed.	45·9577	224·0083	213·1584	4797
28 Mar. (88)	0 Sat. .	17 50 0		23 Mar. (83)	2 Mon. .	9741·9654	123·7001	261·7303	4798
29 Mar. (88)	2 Mon. .	0 2 30		13 Mar. (72)	0 Sat. .	9956·2806	7·2266	233·6441	4799
29 Mar. (88)	3 Tues.	6 15 0		3 Mar. (62)	5 Thur.	170·5959	890·7531	205·5581	4800
29 Mar. (88)	4 Wed.	12 27 30		22 Mar. (81)	4 Wed.	205·2355	826·7366	256·8678	4801
28 Mar. (88)	5 Thur.	18 40 0		10 Mar. (70)	1 Sun. .	80·9189	673·9714	226 0440	4802
29 Mar. (88)	0 Sat. .	0 52 30		27 Feb. (58)	5 Thur.	9956·6022	521·2062	195·2191	4803
29 Mar. (88)	1 Sun. .	7 5 0		18 Mar. (77)	4 Wed.	9991·2419	357·1897	246·5298	4804
29 Mar. (88)	2 Mon. .	13 17 30		7 Mar. (66)	1 Sun. .	9866·9253	304·4245	215·7059	4805
28 Mar. (88)	3 Tues.	19 30 0		25 Mar. (85)	0 Sat. .	9901·5649	240·4080	267·0157	4806
29 Mar. (88)	5 Thur.	1 42 30		14 Mar. (73)	4 Wed.	9777·2483	87·6428	236·1918	4807
29 Mar. (88)	6 Fri. .	7 55 0		4 Mar. (63)	2 Mon. .	9991·5636	971·1693	208·1058	4808
29 Mar. (88)	0 Sat. .	14 7 30		23 Mar. (82)	1 Sun. .	26·2032	907·1528	259·4155	4809
28 Mar. (88)	1 Sun. .	20 20 0		12 Mar. (72)	6 Fri. .	240 5185	790 6792	231·2295	4810
29 Mar. (88)	3 Tues.	2 32 30		1 Mar. (60)	3 Tues.	116·2018	637·9140	200·5055	4811
29 Mar. (88)	4 Wed.	8 45 0		20 Mar (79)	2 Mon. .	150·8415	573·8975	251·8153	4812
29 Mar. (88)	5 Thur.	14 57 30		9 Mar. (68)	6 Fri. .	26·5249	421·1323	220·9914	4813
28 Mar. (88)	6 Fri. .	21 10 0		27 Mar. (87)	5 Thur.	61·1645	357·1158	272·3011	4814
29 Mar. (88)	1 Sun. .	3 22 30		16 Mar. (75)	2 Mon .	9936·8478	204·3506	241·4773	4815
29 Mar. (88)	2 Mon. .	9 35 0		5 Mar. (64)	6 Fri. .	9812·5312	51·5855	210·6535	4816
29 Mar. (88)	3 Tues.	15 47 30		24 Mar. (83)	5 Thur.	9847·1709	987·5689	261·9631	4817
28 Mar. (88)	4 Wed.	22 0 0		13 Mar. (73)	3 Tues.	61·4864	871·0954	233·8770	4818
29 Mar. (88)	6 Fri. .	4 12 30		3 Mar. (62)	1 Sun. .	275·8013	754·6218	205·7910	4819
29 Mar. (88)	0 Sat. .	10 25 0		22 Mar. (81)	0 Sat. .	310·4410	691·6053	257·1007	4820
29 Mar. (88)	1 Sun. .	16 37 30		11 Mar. (70)	4 Wed.	186·1243	537·8401	226·2769	4821

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshadi solar year in Bengal.	Kollam.	A.D.	Jovian Samvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4822	1643	1778	1127	895-96	*1720-21	34 Śārvarin .	44 Sādhāraṇa .	...
4823	1644	1779	1128	896-97	1721-22	35 Plava .	45 Virōdhakṛit .	...
4824	1645	1780	1129	897-98	1722-23	36 Śubhakṛit .	46 Paridhāvin .	5 Śrāvaṇa .
4825	1646	1781	1130	898-99	1723-24	37 Śōbhana .	47 Pramādin .	...
4826	1647	1782	1131	899-900	*1724-25	38 Krōdhin .	48 Ānanda .	...
4827	1648	1783	1132	900-01	1725-26	39 Viśvāvasu .	49 Rākshasa .	4 Āshāḍha .
4828	1649	1784	1133	901-02	1726-27	40 Parābhava .	50 Anala . .	...
4829	1650	1785	1134	902-03	1727-28	41 Plavaṅga .	51 Piṅgala .	...
4830	1651	1786	1135	903-04	*1728-29	42 Kīlaka .	52 Kālayukta .	2 Vaiśākha .
4831	1652	1787	1136	904-05	1729-30	43 Saumya .	53 Siddhārthin .	...
4832	1653	1788	1137	905-06	1730-31	44 Sādhāraṇa .	54 Raudra .	6 Bhādrapada
4833	1654	1789	1138	906-07	1731-32	45 Virōdhakṛit .	55 Durmati .	...
4834	1655	1790	1139	907-08	*1732-33	46 Paridhāvin .	56 Dundubhi .	...
4835	1656	1791	1140	908-09	1733-34	47 Pramādin .	57 Rudhirōdgārin	4 Āshāḍha .
4836	1657	1792	1141	909-10	1734-35	48 Ānanda .	58 Raktāksha .	...
4837	1658	1793	1142	910-11	1735-36	49 Rākshasa .	59 Krōdhana .	...
4838	1659	1794	1143	911-12	*1736-37	50 Anala .	60 Kshaya .	3 Jyēshṭha .
4839	1660	1795	1144	912-13	1737-38	51 Piṅgala .	1 Prabhava .	...
4840	1661	1796	1145	913-14	1738-39	52 Kālayukta .	2 Vibhava .	7 Āśvina .
4841	1662	1797	1146	914 15	1739-40	53 Siddhārthin .	3 Śukla . .	...
4842	1663	1798	1147	915-16	*1740-41	54 Raudra .	4 Pramōda .	...
4843	1664	1799	1148	916-17	1741-42	55 Durmati .	5 Prajāpati .	5 Śrāvaṇa .
4844	1665	1800	1149	917-18	1742-43	56 Dundubhi .	6 Āngirasa .	...
4845	1666	1801	1150	918-19	1743-44	57 Rudhirōdgārin	7 Śrīmukha .	...
4846	1667	1802	1151	919-20	*1744-45	58 Raktāksha .	8 Bhāva .	4 Āshāḍha .

LXI—*Contd.*

COMMENCEMENT OF THE									
SOLAR YEAR.				LUNI-SOLAR YEAR (MEAN SUNRISE OF DAY ON WHICH CHAITRA ŚUKLA 1 ENDED).					Kali.
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.		Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17		19	20	23	24	25	1
		H. M. S.							
28 Mar. (88)	2 Mon. .	22 50 0		28 Mar. (88)	2 Mon. .	9882·1321	437·5321	274·8488	4822
29 Mar. (88)	4 Wed.	5 2 30		17 Mar. (76)	6 Fri. .	9757·8155	284·7669	244·0249	4823
29 Mar. (88)	5 Thur.	11 15 0		7 Mar. (66)	4 Wed.	9972·1307	168·2932	215·9388	4824
29 Mar (88)	6 Fri. .	17 27 30		26 Mar. (85)	3 Tues.	6·7703	104·2768	267·2486	4825
28 Mar. (88)	0 Sat. .	23 40 0		14 Mar. (74)	0 Sat. .	9882·4537	951·5116	236·4247	4826
29 Mar. (88)	2 Mon.	5 52 30		4 Mar. (63)	5 Thur.	96·7690	835·0380	208·3387	4827
29 Mar. (88)	3 Tues.	12 5 0		23 Mar. (82)	4 Wed.	131·4086	771·0215	259·6484	4828
29 Mar. (88)	4 Wed.	18 17 30		12 Mar. (71)	1 Sun. .	7·0920	618·2563	228·8246	4829
29 Mar. (89)	6 Fri. .	0 30 0		29 Feb. (60)	5 Thur.	9882·7754	465·4911	198·0006	4830
29 Mar. (88)	0 Sat. .	6 42 30		19 Mar. (78)	4 Wed.	9917·4150	401·4746	249·3104	4831
29 Mar. (88)	1 Sun. .	12 55 0		8 Mar. (67)	1 Sun. .	9793·0984	248·7095	218·4865	4832
29 Mar. (88)	2 Mon. .	19 7 30		27 Mar. (86)	0 Sat. .	9827·7380	184·6929	269·7963	4833
29 Mar. (89)	4 Wed.	1 20 0		16 Mar. (76)	5 Thur.	42·0533	68·2194	241·7102	4834
29 Mar. (88)	5 Thur.	7 32 30		5 Mar. (64)	2 Mon. .	9917·7367	915·4542	210·8864	4835
29 Mar. (88)	6 Fri. .	13 45 0		24 Mar. (83)	1 Sun. .	9952·3763	851·4377	862·1960	4836
29 Mar. (88)	0 Sat. .	19 57 30		14 Mar. (73)	6 Fri. .	166 6915	734·9641	234·1099	4837
29 Mar. (89)	2 Mon. .	2 10 0		2 Mar. (62)	3 Tues.	42·3749	582·1989	203 2861	4838
29 Mar. (88)	3 Tues.	8 22 30		21 Mar. (80)	2 Mon. .	77·0146	518·1725	254·5958	4839
29 Mar. (88)	4 Wed.	14 35 0		10 Mar (69)	6 Fri. .	9952·6979	365·4172	223·7720	4840
29 Mar. (88)	5 Thur.	20 47 30		29 Mar. (88)	5 Thur.	9987·3376	301·4008	275·1017	4841
29 Mar. (89)	0 Sat. .	3 0 0		17 Mar. (77)	2 Mon. .	9863·0209	148·6356	244·2579	4842
29 Mar (88)	1 Sun. .	9 12 30		7 Mar. (66)	0 Sat. .	77·3362	31·1620	216·1717	4843
29 Mar. (88)	2 Mon. .	15 25 0		26 Mar. (85)	6 Fri. .	111·9758	968·1455	267·4815	4844
29 Mar. (88)	3 Tues.	21 37 30		15 Mar. (74)	3 Tues.	9987 6592	815·3803	236·6576	4845
29 Mar. (89)	5 Thur.	3 50 0		4 Mar. (64)	1 Sun. .	201·9744	698·9068	208·5707	4846

TABLE

CONCURRENT YEAR.								
Kali.	Śaka.	Chaitrādi Vikrama.	Mēshādi solar year in Bengal.	Kollam.	A.D.	Jovian Samvatsara.		Intercalated (*adhika*) and suppressed (*kshaya*) Lunar months (true).
						Southern system.	Northern system.	
1	2	3	3*a*	4	5	6	7	8
4847	1668	1803	1152	920-21	1745-46	59 Krōdhana .	9 Yuvan . .	...
4848	1669	1804	1153	921-22	1746-47	60 Kshaya .	10 Dhātṛi . .	...
4849	1670	1805	1154	922-23	1747-48	1 Prabhava .	11 Īśvara . .	1 Chaiṭra .
4850	1671	1806	1155	923-24	*1748-49	2 Vibhava .	12 Bahudhānya .	...
4851	1672	1807	1156	924-25	1749-50	3 Śukla .	13 Pramāthin .	6 Bahudhānya
4852	1673	1808	1157	925-26	1750-51	4 Pramōda .	14 Vikrama .	...

LXI—*Concld.*

COMMENCEMENT OF THE							Kali.
SOLAR YEAR.			LUNI-SOLAR YEAR (MEAN SUNRISE OF DAY ON WHICH CHAITRA ŚUKLA 1 ENDED).				
Day and month, A.D.	Week-day.	Time of true Mēsha-samkrānti.	Day and month, A.D.	Week-day.	*a.*	*b.*	*c.*	
13	14	17	19	20	23	24	25	1
		H. M S.						
29 Mar. (88)	6 Fri. .	10 2 30	23 Mar. (82)	0 Sat. .	236·6140	634·8902	259·8813	4847
29 Mar (88)	0 Sat .	16 15 0	12 Mar. (71)	4 Wed.	112·2974	482·1250	229·0575	4848
29 Mar. (88)	1 Sun. .	22 27 30	1 Mar. (60)	1 Sun. .	9987 9809	329 3599	198 2335	4849
29 Mar. (89)	3 Tues.	4 40 0	19 Mar. (79)	0 Sat. .	22·6204	265 3434	249·5433	4850
29 Mar. (88)	4 Wed.	10 52 30	8 Mar. (67)	4 Wed.	9898 3038	112·5782	219·7194	4851
29 Mar. (88)	5 Thur.	17 5 0	27 Mar. (86)	3 Tues.	9932·9434	48·5617	270·0292	4852

TABLE LXII.

Names of months and nakshatras.

(Corresponding to Table II, Part II, "Indian Calendar.")

Lunar months.			Solar months.					
No.	Usual name.	Tamil name.	No.	Sign name.	Bengal name.	Tamil name.	Malayālam name.	Orissa name.
1	2	3	4	5	6	7	8	9
1	Chaitra .	Paggu .	1	Mēsha .	Vaiśākha .	Chittirai .	Mēḍam .	Baiśāk
2	Vaiśākha .	Bēsa .	2	Vṛishabha	Jyēshṭha .	Vaikāśi[1] .	Ēḍavam .	Joiṣṭhō.
3	Jyēshtha .	Kārtelu .	3	Mithuna .	Āshāḍha .	Āni . .	Midunam .	Assar.
4	Āshāḍha .	Āti . .	4	Karka .	Śrāvaṇa .	Āḍi . .	Karkaḍagam	Sawun.
5	Śrāvaṇa .	Sōna .	5	Simha .	Bhādrapada	Āvani .	Chiṅgam .	Bhādro.
6	Bhādrapada	Nirnāla .	6	Kanyā .	Āsvina .	Purattāḍi[2]	Kanni .	Āssin.
7	Āśvina .	Bontelu .	7	Tulā .	Kārttika .	Aippaśi[3] .	Tuḷām .	Kāṛttik.
8	Kārttika .	Jarde .	8	Vṛiśchika .	Mārgaśira .	Kārttigai .	Vṛiśchikam	Āghrān.
9	Mārgaśira .	Perārde .	9	Dhanus .	Pausha .	Mārgaṛi .	Dhanu .	Paus.
10	Pausha .	Pūntelu .	10	Makara .	Māgha . .	Tai . .	Makaram .	Māgha.
11	Māgha .	Māyi .	11	Kumbha .	Phālguna .	Māsi .	Kumbham	Falgun.
12	Phālguna .	Suggi .	12	Mīna .	Chaitra .	Panguni .	Mīnam .	Choitro.

[1] or Vaiyāśi. [2] or Purattāśi. [3] or Ārppiśi, or Appiśi.

Nakshatras.[1]

No.	Name.	Tamil name.	Deity.	No.	Name.	Tamil name.	Deity.
1	Aśvinī .	Asuvati . .	Aśvin.	15	Svāti . .	Sōdi . .	Vāyu.
2	Bharaṇī .	Bharaṇī . .	Yama.	16	Viśākhā. .	Viśākam .	Indrāgnī.
3	Kṛittikā .	Kiruttigai .	Agni.	17	Anurādhā .	Anusham, or Anilam.	Mitra.
4	Rohiṇī .	Rohiṇī . .	Prajāpati.	18	Jyēshṭhā .	Kēṭṭai .	Indra.
5	Mrigaśira .	Mirugusīram .	Sōma.	19	Mūla . .	Mūlam .	Nirṛiti.
6	Ārdrā .	Ārudra, or Tiruvādirai.	Rudra.	20	Purva-Ashādhā.	Pūrāḍam .	Āpaḥ.
7	Punarvasu .	Punarpūsam .	Aditi.	21	Uttara-Ashādhā.	Uttirāḍam .	Viśvadēva.
8	Pushya .	Pūsam . .	Bṛihaspati		Abhijit. .	...	Brahman.
9	Āślēshā .	Āyilyam . .	Sarpāḥ.	22	Śravaṇa .	Tiruvōnam .	Vishṇu.
10	Maghā .	Magham . .	Pitaraḥ.	23	Dhanishṭhā or Śravishṭhā.	Aviṭṭam .	Vasavaḥ.
11	Pūrva-Phalgunī.	Pūram . .	Bhaga.	24	Śatabhishaj or Śatatārakā.	Sadayam .	Varuṇa.
12	Uttara-Phalgunī.	Uttiram . .	Āryaman.	25	Pūrva-Bhadrapadā.	Pūraṭṭāḍi .	Aja Ēkapād.
13	Hasta . .	Hastam or Attam.	Savitṛi.	26	Uttara-Bhadrapadā.	Uttiraṭṭādi .	Ahi Budhnya.
14	Chitrā . .	Chittirai . .	Tvashṭṛi.	27	Rēvatī . .	Rēvatī .	Pūshan.

[1] Tamil names and those of Deities are borrowed from Dewan Bahadur L. D. Swamikannu Pillai's "*Indian Chronology.*"

TABLE LXIII A.

(Corresponding to Table III, Part I, "Indian Calendar.")

COLLECTIVE DURATION OF MEAN LUNAR MONTHS.

LUNI-SOLAR YEAR (CHAITRĀDI).				
Serial number.	Name of month.	COLLECTIVE DURATION FROM BEGINNING OF YEAR TO END OF EACH *mean* LUNAR MONTH.		
		Exactly in Tithis.	In civil days.	
			Approximate.	Exact.
1	2	3	3*a*	3*b*
1	Chaitra . . .	30	30	29·53
2	Vaiśākha . .	60	59	59·06
3	Jyēshṭha . .	90	89	88·59
4	Āshāḍha . .	120	118	118·12
5	Śrāvaṇa . .	150	148	147·65
6	Bhādrapada . .	180	177	177·18
7	Āśvina . . .	210	207	206·71
8	Kārttika . .	240	236	236·24
9	Mārgaśira . .	270	266	265·77
10	Pausha . . .	300	295	295·30
11	Māgha	330	325	324·83
12	Phālguna . .	360	354	354·36
	In intercalary years.	390	384	383·89

TABLE

DURATION AND COLLECTIVE DURATION OF TRUE SOLAR MONTHS, WITH INCREASE

The values are those

"*W. D.*"—*Week-day.* *a in 10,000ths*

(*This Table supersedes Table XVIII A, "Indian*

Luni-solar months ending at the second of the two solar samkrāntis with which it is connected.	At the true solar samkrānti.	Collective duration in days, hours, etc., and collective increase of *a*, *b*, *c* from true Mēsha-samkrānti to each true samkrānti.							
		D.	W-D.	H.	M.	S.	*a*	*b*	*c*
1	2	3					4	5	6
1. Chaitra . .	Mīna-s. (*of previous year*).								
	Mēsha-samk .	0	(0)	0	0	0	0	0	0
2. Vaiśākha .	Vṛishabha-samk .	30	(2)	22	11	6·99	471·9831	122·2961	84·6643
3. Jyēshṭha . .	Mithuna-samk .	62	(6)	7	47	43·05	1105·1653	261·8682	170·6319
4. Āshādha .	Karka-samk .	93	(2)	22	22	0·37	1808·3520	408·9426	257·1654
5. Śrāvaṇa . .	Simha-samk .	125	(6)	9	34	40·40	2464·1251	550·9358	343·3157
6. Bhādrapada .	Kanyā-samk .	156	(2)	10	24	24·88	2973·4105	677·2297	428·2817
7 Āśvina . .	Tulā-samk . .	186	(4)	21	21	37·82	3286·9182	782·5419	511·6648
8. Kārttika .	Vṛiśchika-samk .	216	(6)	19	2	43·34	3413·2087	867·7898	593·5344
9 Margasīrsha .	Dhanus-samk .	246	(1)	7	15	59·08	3405·9677	938·7268	674·3243
10. Pausha . .	Makara-samk .	275	(2)	15	41	4·81	3345·0707	3·9135	754·6804
11. Māgha . .	Kumbha-samk .	305	(4)	2	39	12·57	3320·1612	72·9570	835·3275
12. Phālguna .	Mīna-samk . .	334	(5)	22	4	5·29	3414·4196	154·7719	916·9379
1. Chaitra (*of following year*).	Mēsha-samk (*of following year.*	365	(1)	6	12	30·0	3688·2315	255·8299	1000·0

NOTE.

EXACT VALUE OF "*c*" AND OF "EQUATION *c*." AT THE SEVERAL TRUE SAMKRĀNTIS IN EACH YEAR.

Samkrānti.	*c*.	Eqn. *c*.
1. Mēsha-samkr. .	277·4558	0·9119
2. Vṛishabha-samkr.	362·1201	14·2168
3. Mithuna-samkr.	448·0877	40·5649
4. Karka-samkr. .	534·6212	72·5193
5. Simha-samkr. .	620·7715	100·7366
6. Kanyā-samkr. .	705·7375	117·0626
7. Tulā-samkr. .	789·1206	117·5601
8. Vṛiśchika-samkr.	870·9902	102·9215
9. Dhanus-samkr. .	951·7801	77·4872
10. Makara-samkr. .	32·1362	47·7147
11. Kumbha-samkr.	112·7833	20·8518
12. Mīna-samkr. .	194 3937	3·6236

LXIII B.

OF *a*, *b*, *c*, AT EACH SAṂKRĀNTI BY THE FIRST ĀRYA-SIDDHĀNTA.

fixed by M. de Ries.

of circle; b and c in 1,000ths.

Chronography,"p. 132, and "Indian Calendar," Table III, Part II.

At true solar saṁkrānti.	Length of month preceding each true samkrānti and increase of *a*, *b*, *c*, between each true samkrānti.							
	D.	W-D.	H.	M.	S.	*a.*	*b.*	*c.*
7	8					9	10	11
Mēsha-saṁk . .	0	0	0	0	0	0	0	0
Vṛishabha-saṁk . .	30	(2)	22	11	6·99	471·9831	122·2961	84·6643
Mithuna-saṁk . .	31	(3)	9	36	36·06	633·1822	139·5721	85·9676
Karka-saṁk . .	31	(3)	14	34	17·32	703 1867	147·0744	86·5335
Simha-saṁk . .	31	(3)	11	12	40 02	655·7731	141·9932	86·1503
Kanyā-samk . .	31	(3)	0	49	44·48	509 2854	126·2939	84·9660
Tulā-saṁk . .	30	(2)	10	57	12·94	313·5077	105·3122	83 3831
Vṛischika-saṁk . .	29	(1)	21	41	5·52	126·2905	85·2479	81·8696
Dhanus-saṁk . .	29	(1)	12	13	15·74	9992·7590	70·9370	80·7899
Makara-saṁk . .	29	(1)	8	25	5·73	9939·1030	65·1867	80·3561
Kumbha-saṁk . .	29	(1)	10	58	7·76	9975·0905	69·0435	80·6471
Mīna-saṁk . .	29	(1)	19	24	52·72	94·2584	81·8149	81·6104
Mēsha-saṁk (*of following year*).	30	(2)	8	8	24·71	273·8119	101 0580	83·0622

TABLE LXIV.

INCREASE OF *a*, *b*, *c*, IN DAYS OF 24 HOURS EACH BY THE FIRST ARYA-SIDDHANTA, WITH LALLA'S BĪJA.

a in 10,000ths; *b* and *c* in 1,000ths of circle.

This Table corresponds to Table IV, "Indian Calendar."

Increase in	*a*.	*b*.	*c*.
One day	338·631873982	36·291623738	2·737785720
One year of 365 days	3600·634003430	246·442664370	999·291787800
One year of 366 days	3939·265877412	282·734288108	2·029573520
One century of 36,525 days . . .	8529·197184659	551·557045243	997·623429986
One century of 36,526 days . . .	8867·829058641	587·848668981	0·361215706

DAYS OF 24 HOURS EACH.

No.	Week day.	*a*.	*b*.	*c*.	No.	Week day.	*a*.	*b*.	*c*.
1	2	3	4	5	1	2	3	4	5
1	1	338·6319	36·2916	2·7378	31	3	497·5881	125·0403	84·8714
2	2	677·2637	72·5832	5·4756	32	4	836·2200	161·3320	87·6091
3	3	1015·8956	108·8749	8·2134	33	5	1174·8518	197·6236	90·3469
4	4	1354·5275	145·1665	10·9511	34	6	1513·4837	233·9152	93·0847
5	5	1693·1594	181·4581	13·6889	35	0	1852·1156	270·2068	95·8225
6	6	2031·7912	217·7497	16·4267	36	1	2190·7475	306·4985	98·5603
7	0	2370·4231	254·0414	19·1645	37	2	2529·3793	342·7901	101·2981
8	1	2709·0550	290·3330	21·9023	38	3	2868·0112	379·0817	104·0359
9	2	3047·6869	326·6246	24·6401	39	4	3206·6431	415·3733	106·7736
10	3	3386·3187	362·9162	27·3779	40	5	3545·2750	451·6649	109·5114
11	4	3724·9506	399·2079	30·1156	41	6	3883·9068	487·9566	112·2492
12	5	4063·5825	435·4995	32·8534	42	0	4222·5387	524·2482	114·9870
13	6	4402·2144	471·7911	35·5912	43	1	4561·1706	560·5398	117·7248
14	0	4740·8462	508·0827	38·3290	44	2	4899 8025	596·8314	120·4626
15	1	5079·4781	544·3744	41·0668	45	3	5238·4343	633·1231	123·2004
16	2	5418·1100	580·6660	43·8046	46	4	5577·0662	669·4147	125·9381
17	3	5756·7419	616·9576	46·5424	47	5	5915 6981	705·7063	128·6759
18	4	6095·3737	653·2492	49·2801	48	6	6254·3300	741·9979	131·4137
19	5	6434·0056	689·5409	52·0179	49	0	6592·9618	778·2896	134·1515
20	6	6772·6375	725·8325	54·7557	50	1	6931·5937	814·5812	136·8893
21	0	7111·2694	762·1241	57·4935	51	2	7270·2256	850·8728	139·6271
22	1	7449·9012	798·4157	60·2313	52	3	7608·8574	887·1644	142·3649
23	2	7788·5331	834·7073	62·9691	53	4	7947·4893	923·4561	145·1026
24	3	8127·1650	870·9990	65·7069	54	5	8286·1212	959·7477	147·8404
25	4	8465·7968	907·2906	68·4446	55	6	8624·7531	996·0393	150·5782
26	5	8804·4287	943·5822	71·1824	56	0	8963·3849	32·3309	153·3160
27	6	9143·0606	979·8738	73 9202	57	1	9302·0168	68·6226	156·0538
28	0	9481·6925	16·1655	76·6580	58	2	9640·6487	104·9142	158·7916
29	1	9820·3243	52·4571	79·3958	59	3	9979·2806	141·2058	161·5294
30	2	158·9562	88·7487	82·1336	60	4	317·9124	177·4974	164·2671

TABLE LXIV—*Contd.*

DAYS—*Contd.*

No.	Week day.	*a.*	*b.*	*c.*	No.	Week day.	*a.*	*b.*	*c.*
1	2	3	4	5	1	2	3	4	5
61	5	656·5443	213·7890	167·0049	111	6	7588·1380	28·3702	303·8942
62	6	995·1762	250·0807	169·7427	112	0	7926·7699	64·6619	306·6320
63	0	1333·8081	286·3723	172·4805	113	1	8265·4018	100·9535	309·3698
64	1	1672·4399	322·6639	175·2183	114	2	8604·0336	137·2451	312·1076
65	2	2011·0718	358·9555	177·9561	115	3	8942·6655	173·5367	314·8454
66	3	2349·7037	395·2472	180·6939	116	4	9281·2974	209·8284	317·5831
67	4	2688·3356	431·5388	183·4316	117	5	9619·9293	246·1200	320·3209
68	5	3026·9674	467·8304	186·1694	118	6	9958·5611	282·4116	323·0587
69	6	3365·5993	504·1220	188·9072	119	0	297·1930	318·7032	325·7965
70	0	3704·2312	540·4137	191·6450	120	1	635·8249	354·9948	328·5343
71	1	4042·8631	576·7053	194·3828	121	2	974·4568	391·2865	331·2721
72	2	4381·4949	612·9969	197·1206	122	3	1313·0886	427·5781	334·0099
73	3	4720·1268	649·2885	199·8584	123	4	1651·7205	463·8697	336·7476
74	4	5058·7587	685·5801	202·5961	124	5	1990·3524	500·1613	339·4854
75	5	5397·3905	721·8718	205·3339	125	6	2328·9842	536·4530	342·2232
76	6	5736·0224	758·1634	208·0717	126	0	2667·6161	572·7446	344·9610
77	0	6074·6543	794·4550	210·8095	127	1	3006·2480	609·0362	347·6988
78	1	6413·2862	830·7467	213·5473	128	2	3344·8799	645·3278	350·4366
79	2	6751·9180	867·0383	216·2851	129	3	3683·5117	681·6195	353·1744
80	3	7090·5499	903·3299	219·0229	130	4	4022·1436	717·9111	355·9121
81	4	7429·1818	939·6215	221·7606	131	5	4360·7755	754·2027	358·6499
82	5	7767·8137	975·9131	224·4984	132	6	4699·4074	790·4943	361·3877
83	6	8106·4455	12·2048	227·2362	133	0	5038·0392	826·7860	364·1255
84	0	8445·0774	48·4964	229·9740	134	1	5376·6711	863·0776	366·8633
85	1	8783·7093	84·7880	232·7118	135	2	5715·3030	899·3692	369·6011
86	2	9122·3412	121·0796	235·4496	136	3	6053·9349	935·6608	372·3389
87	3	9460·9730	157·3713	238·1874	137	4	6392·5667	971·9525	375·0766
88	4	9799·6049	193·6629	240·9251	138	5	6731·1986	8·2441	377·8144
89	5	138·2367	229·9545	243·6629	139	6	7069·8305	44·5357	380·5522
90	6	476·8687	266·2461	246·4007	140	0	7408·4624	80·8273	383·2900
91	0	815·5005	302·5378	249·1385	141	1	7747·0942	117·1189	386·0278
92	1	1154·1324	338·8294	251·8763	142	2	8085·7261	153·4106	388·7656
93	2	1492·7643	375·1210	254·6141	143	3	8424·3580	189·7022	391·5034
94	3	1831·3962	411·4126	257·3519	144	4	8762·9899	225·9938	394·2411
95	4	2170·0280	447·7043	260·0896	145	5	9101·6217	262·2854	396·9789
96	5	2508·6599	483·9959	262·8274	146	6	9440·2536	298·5771	399·7167
97	6	2847·2918	520·2875	265·5652	147	0	9778·8855	334·8686	402·4545
98	0	3185·9237	556·5791	268·3030	148	1	117·5173	371·1603	405·1923
99	1	3524·5555	592·8708	271·0408	149	2	456·1492	407·4519	407·9301
100	2	3863·1874	629·1624	273·7786	150	3	794·7811	443·7436	410·6679
101	3	4201·8193	665·4540	276·5164	151	4	1133·4130	480·0352	413·4056
102	4	4540·4511	701·7456	279·2541	152	5	1472·0448	516·3268	416·1434
103	5	4879·0830	738·0372	281·9919	153	6	1810·6767	552·6184	418·8812
104	6	5217·7149	774·3289	284·7297	154	0	2149·3086	588·9101	421·6190
105	0	5556·3468	810·6205	287·4675	155	1	2487·9405	625·2017	424·3568
106	1	5894·9786	846·9121	290·2053	156	2	2826·5723	661·4933	427·0946
107	2	6233·6105	883·2037	292·9431	157	3	3165·2042	697·7849	429·8324
108	3	6572·2424	919·4954	295·6809	158	4	3503·8361	734·0766	432·5701
109	4	6910·8743	955·7870	298·4186	159	5	3842·4680	770·3682	435·3079
110	5	7249·5061	992·0786	301·1564	160	6	4181·0998	806·6598	438·0457

TABLE LXIV—*Contd.*

Days—*Contd.*

No.	Week day.	*a.*	*b.*	*c.*	No.	Week day.	*a.*	*b.*	*c.*
1	2	3	4	5	1.	2	3	4	5
161	0	4519·7317	842·9514	440·7835	211	1	1451·3254	657·5326	577·6728
162	1	4858·3636	879·2430	443·5213	212	2	1789·9572	693·8242	580·4106
163	2	5196·9955	915·5347	446·2591	213	3	2128·5892	729·1159	583·1484
164	3	5535·6273	951·8263	448·9969	214	4	2467·2210	766·4075	585·8861
165	4	5874·2592	988·1179	451·7346	215	5	2805·8529	802·6991	588·6239
166	5	6212·8911	24·4095	454·4724	216	6	3144·4848	838·9907	591·3617
167	6	6551·5230	60·7012	457·2102	217	0	3483·1167	875·2824	594·0995
168	0	6890·1548	96·9928	459·9480	218	1	3821·7485	911·5740	596·8373
169	1	7228·7867	133·2844	462·6858	219	2	4160·3804	947·8656	599·5751
170	2	7567·4186	169·5760	465·4236	220	3	4499·0123	984·1572	602·3129
171	3	7906·0505	205·8677	468·1613	221	4	4837·6442	20·4488	605·0506
172	4	8244·6823	242·1593	470·8991	222	5	5176·2760	56·7405	607·7884
173	5	8583·3142	278·4509	473·6369	223	6	5514·9079	93·0321	610·5262
174	6	8921·9461	314·7425	476·3747	224	0	5853·5398	129·3237	613·2640
175	0	9260·5779	351·0342	479·1125	225	1	6192·1716	165·6153	616·0018
176	1	9599·2098	387·3258	481·8503	226	2	6530·8035	201·9070	618·7396
177	2	9937·8417	423·6174	484·5881	227	3	6869·4354	238·1986	621·4774
178	3	276·4736	459·9090	487·3259	228	4	7208·0673	274·4902	624·2151
179	4	615·1054	496·2006	490·0636	229	5	7546·6991	310·7818	626·9529
180	5	953·7373	532·4923	492·8014	230	6	7885·3310	347·0735	629·6907
181	6	1292·3692	568·7839	495·5392	231	0	8223·9629	383·3651	632·4285
182	0	1631·0011	605·0755	498·2770	232	1	8562·5948	419·6567	635·1663
183	1	1969·6329	641·3671	501·0148	233	2	8901·2266	455·9483	637·9041
184	2	2308·2648	677·6588	503·7526	234	3	9239·8585	492·2400	640·6419
185	3	2646·8967	713·9504	506·4904	235	4	9578·4904	528·5316	643·3796
186	4	2985·5286	750·2420	509·2281	236	5	9917·1223	564·8232	646·1174
187	5	3324·1604	786·5336	511·9659	237	6	255·7541	601·1148	648·8552
188	6	3662·7923	822·8253	514·7037	238	0	594·3860	637·4064	651·5930
189	0	4001·4242	858·1169	517·4415	239	1	933·0179	673·6981	654·3308
190	1	4340·0561	895·4085	520·1793	240	2	1271·6498	709·9897	657·0686
191	2	4678·6879	931·7001	522·9171	241	3	1610·2816	746·2813	659·8064
192	3	5017·3198	967·9918	525·6549	242	4	1948·9135	782·5729	662·5441
193	4	5355·9517	4·2834	528·3926	243	5	2287·5454	818·8646	665·2819
194	5	5694·5836	40·5750	531·1304	244	6	2626·1773	855·1562	668·0197
195	6	6033·2154	76·8666	533·8682	245	0	2964·8091	891·4478	670·7575
196	0	6371·8473	113·1583	536·6060	246	1	3303·4410	927·7394	673·4953
197	1	6710·4792	149·4499	539·3438	247	2	3642·0729	964·0311	676·2331
198	2	7049·1110	185·7415	542·0816	248	3	3980·7047	0·3227	678·9709
199	3	7387·7429	222·0331	544·8194	249	4	4319·3366	36·6143	681·7086
200	4	7726·3748	258·3247	547·5571	250	5	4657·9685	72·9059	684·4464
201	5	8065·0067	294·6164	550·2949	251	6	4996·6004	109·1976	687·1842
202	6	8403·6385	330·9080	553·0327	252	0	5335·2322	145·4892	689·9220
203	0	8742·2704	367·1996	555·7705	253	1	5673·8641	181·7808	692·6598
204	1	9080·9023	403·4912	558·5083	254	2	6012·4960	218·0724	695·3976
205	2	9419·5342	439·7829	561·2461	255	3	6351·1279	254·3641	698·1354
206	3	9758·1660	476·0745	563·9839	256	4	6689·7597	290·6557	700·8731
207	4	96·7979	512·3661	566·7216	257	5	7028·3916	326·9473	703·6109
208	5	435·4298	548·6577	569·4594	258	6	7367·0235	363·2389	706·3487
209	6	774·0617	584·9494	572·1972	259	0	7705·6554	399·5305	709·0865
210	0	1112·6935	621·2410	574·9350	260	1	8044·2872	435·8222	711·8243

TABLE LXIV—*Contd.*

DAYS—*Contd.*

No.	Week day.	*a.*	*b.*	*c.*	No.	Week day.	*a.*	*b.*	*c.*
1	2	3	4	5	1	2	3	4	5
261	2	8382·9191	472·1138	714·5621	311	3	5314·5128	286·6950	851·4514
262	3	8721·5510	508·4054	717·2999	312	4	5653·1446	322·9866	854·1891
263	4	9060·1829	544·6970	720·0376	313	5	5991·7766	359·2782	856·9269
264	5	9398·8147	580·9887	722·7754	314	6	6330·4084	395·5699	859·6647
265	6	9737·4466	617·2803	725·5132	315	0	6669·0403	431·8615	862·4025
266	0	76·0785	653·5719	728·2510	316	1	7007·6722	468·1531	865·1403
267	1	414·7104	689·8635	730·9888	317	2	7346·3041	504·4447	867·8781
268	2	753·3422	726·1552	733·7266	318	3	7684·9359	540·7363	870·6159
269	3	1091·9741	762·4468	736·4644	319	4	8023·5678	577·0280	873·3536
270	4	1430·6060	798·7384	739·2021	320	5	8362·1997	613·3196	876·0914
271	5	1769·2378	835·0300	741·9399	321	6	8700·8315	649·6112	878·8292
272	6	2107·8697	871·3217	744·6777	322	0	9039·4634	685·9028	881·5670
273	0	2446·5016	907·6133	747·4155	323	1	9378·0953	722·1945	884·3048
274	1	2785·1335	943·9049	750·1533	324	2	9716·7272	758·4861	887·0426
275	2	3123·7653	979·1965	752·8911	325	3	55·3590	794·7777	889·7804
276	3	3462·3972	16·4882	755·6289	326	4	394·9909	831·0693	892·5181
277	4	3801·0291	52·7798	758·3666	327	5	732·6228	867·3610	895·2559
278	5	4139·6610	89·0714	761·1044	328	6	1071·2547	903·6526	897·9937
279	6	4478·2928	125·3630	763·8422	329	0	1409·8865	939·9442	900·7315
280	0	4816·9247	161·6546	766·5800	330	1	1748·5184	976·2358	903·4693
281	1	5155·5566	197·9463	769·3178	331	2	2087·1503	12·5275	906·2071
282	2	5494·1885	234·2379	772·0556	332	3	2425·7822	48·8191	908·9449
283	3	5832·8203	270·5295	774·7934	333	4	2764·4140	85·1107	911·6826
284	4	6171·4522	306·8211	777·5311	334	5	3103·0459	121·4023	914·4204
285	5	6510·0841	343·1128	780·2689	335	6	3441·6778	157·6940	917·1582
286	6	6848·7160	379·4044	783·0067	336	0	3780·3097	193·9856	919·8960
287	0	7187·3478	415·6960	785·7445	337	1	4118·9415	230·2772	922·6338
288	1	7525·9797	451·9876	788·4823	338	2	4457·5734	266·5688	925·3716
289	2	7864·6116	488·2793	791·2201	339	3	4796·2053	302·8604	928·1094
290	3	8203·2435	524·5709	793·9579	340	4	5134·8372	339·1521	930·8471
291	4	8541·8753	560·8625	796·6956	341	5	5473·4690	375·4437	933·5849
292	5	8880·5072	597·1541	799·4334	342	6	5812·1009	411·7353	936·3227
293	6	9219·1391	633·4458	802·1712	343	0	6150·7328	448·0269	939·0605
294	0	9557·7710	669·7374	804·9090	344	1	6489·3646	484·3186	941·7983
295	1	9896·4028	706·0290	807·6468	345	2	6827·9965	520·6102	944·5361
296	2	235·0347	742·3206	810·3846	346	3	7166·6284	556·9018	947·2739
297	3	573·6666	778·6123	813·1224	347	4	7505·2603	593·1934	950·0116
298	4	912·2984	814·9039	815·8601	348	5	7843·8921	629·4851	952·7494
299	5	1250·9303	851·1955	818·5979	349	6	8182·5240	665·7767	955·4872
300	6	1589·5622	887·4871	821·3357	350	0	8521·1559	702·0683	958·2250
301	0	1928·1941	923·7787	824·0735	351	1	8859·7878	738·3599	960·9628
302	1	2266·8259	960·0704	826·8113	352	2	9198·4196	774·6516	963·7006
303	2	2605·4578	996·3620	829·5491	353	3	9537·0515	810·9432	966·4384
304	3	2944·0897	32·6536	832·2869	354	4	9875·6834	847·2348	969·1761
305	4	3282·7216	68·9452	835·0246	355	5	214·3153	883·5264	971·9139
306	5	3621·3534	105·2369	837·7624	356	6	552·9471	919·8181	974·6517
307	6	3959·9853	141·5285	840·5002	357	0	891·5790	956·1097	977·3895
308	0	4298·6172	177·8201	843·2380	358	1	1230·2109	992·4013	980·1273
309	1	4637·2491	214·1117	845·9758	359	2	1568·8428	28·6929	982·8651
310	2	4975·8809	250·4034	848·7136	360	3	1907·4746	64·9845	985·6029

TABLE LXIV—*Concld.*

DAYS—*Concld.*

No.	Week day.	*a.*	*b.*	*c.*	No.	Week day.	*a.*	*b.*	*c.*
1	2	3	4	5	1	2	3	4	5
361	4	2246·1065	101·2762	988·3406	376	5	7325·5846	645·6505	29·4074
362	5	2584·7384	137·5678	991·0784	377	6	7664·2165	681·9421	32·1452
363	6	2923·3703	173·8594	993·8162	378	0	8002·8484	718·2338	34·8830
364	0	3262·0021	210·1510	996·5540	379	1	8341·4802	754·5254	37·6208
365	1	3600·6340	246·4427	999·2918	380	2	8680·1121	790·8170	40·3586
366	2	3939·2659	282·7343	2·0296	381	3	9018·7440	827·1086	43·0964
367	3	4277·8978	319·0259	4·7674	382	4	9357·3759	863·4003	45·8341
368	4	4616·5296	355·3175	7·5051	383	5	9696·0077	899·6919	48·5719
369	5	4955·1615	391·6092	10·2429	384	6	34·6396	935·9835	51·3097
370	6	5293·7934	427·9008	12·9807	385	0	373·2715	972·2751	54·0475
371	0	5632·4252	464·1924	15·7185					
372	1	5971·0571	500·4840	18·4563					
373	2	6309·6890	536·7757	21·1941					
374	3	6648·3209	573·0673	23·9319					
375	4	6986·9527	609·3589	26·6696					

TABLE LXV.

INCREASE OF *a*, *b*, *c* BY THE FIRST ĀRYA-SIDDHĀNTA WITH LALLA'S BĪJA.

HOURS, MINUTES AND SECONDS.

(*a* in 10,000ths of circle; *b* and *c* in 1,000ths.)

This Table corresponds to Table V, "Indian Calendar."

Increase in	*a.*	*b.*	*c.*
One hour	14·109661416	1·512150989	0·114074405
One minute	0·235161024	0·025202517	0·001901210
One second	0·003919350	0·000420042	0·000031687

HOURS.

No.	*a.*	*b.*	*c.*	No.	*a.*	*b.*	*c.*
1	14·1097	1·5122	0·1141	13	183·4256	19·6580	1·4830
2	28·2193	3·0243	0·2281	14	197·5353	21·1701	1·5970
3	42·3290	4·5365	0·3422	15	211·6449	22·6823	1·7111
4	56·4386	6·0486	0·4563	16	225·7546	24·1944	1·8252
5	70·5483	7·5608	0·5704	17	239·8642	25·7066	1·9393
6	84·6580	9·0729	0·6844	18	253·9739	27·2187	2·0533
7	98·7676	10·5851	0·7985	19	268·0836	28·7309	2·1674
8	112·8773	12·0972	0·9126	20	282·1932	30·2430	2·2815
9	126·9870	13·6094	1·0267	21	296·3029	31·7552	2·3956
10	141·0966	15·1215	1·1407	22	310·4126	33·2673	2·5096
11	155·2063	16·6337	1·2548	23	324·5222	34·7795	2·6237
12	169·3159	18·1458	1·3689	24	338·6319	36·2916	2·7378

MINUTES.

No.	*a.*	*b.*	*c.*	No.	*a.*	*b.*	*c.*	No.	*a.*	*b.*	*c.*
1	0·2352	0·0252	0·0019	21	4·9384	0·5293	0·0399	41	9·6416	1·0333	0·0780
2	0·4703	0·0504	0·0038	22	5·1735	0·5545	0·0418	42	9·8768	1·0585	0·0799
3	0·7055	0·0756	0·0057	23	5·4087	0·5797	0·0437	43	10·1119	1·0837	0·0818
4	0·9406	0·1008	0·0076	24	5·6439	0·6049	0·0456	44	10·3471	1·1089	0·0837
5	1·1758	0·1260	0·0095	25	5·8790	0·6301	0·0475	45	10·5822	1·1341	0·0856
6	1·4110	0·1512	0·0114	26	6·1142	0·6553	0·0494	46	10·8174	1·1593	0·0875
7	1·6461	0·1764	0·0133	27	6·3493	0·6805	0·0513	47	11·0526	1·1845	0·0894
8	1·8813	0·2016	0·0152	28	6·5845	0·7057	0·0532	48	11·2877	1·2097	0·0913
9	2·1164	0·2268	0·0171	29	6·8197	0·7309	0·0551	49	11·5229	1·2349	0·0932
10	2·3516	0·2520	0·0190	30	7·0548	0·7561	0·0570	50	11·7581	1·2601	0·0951
11	2·5868	0·2772	0·0209	31	7·2900	0·7813	0·0589	51	11·9932	1·2853	0·0970
12	2·8219	0·3024	0·0228	32	7·5252	0·8065	0·0608	52	12·2284	1·3105	0·0989
13	3·0571	0·3276	0·0247	33	7·7603	0·8317	0·0627	53	12·4635	1·3357	0·1008
14	3·2923	0·3528	0·0266	34	7·9955	0·8569	0·0646	54	12·6987	1·3609	0·1027
15	3·5274	0·3780	0·0285	35	8·2306	0·8821	0·0665	55	12·9339	1·3861	0·1046
16	3·7626	0·4032	0·0304	36	8·4658	0·9073	0·0684	56	13·1690	1·4113	0·1065
17	3·9977	0·4284	0·0323	37	8·7010	0·9325	0·0703	57	13·4042	1·4365	0·1084
18	4·2329	0·4536	0·0342	38	8·9361	0·9577	0·0722	58	13·6393	1·4617	0·1103
19	4·4681	0·4788	0·0361	39	9·1713	0·9829	0·0741	59	13·8745	1·4869	0·1122
20	4·7032	0·5041	0·0380	40	9·4064	1·0081	0·0760	60	14·1097	1·5122	0·1141

TABLE LXV—*Contd.*

SECONDS.

No.	*a.*	*b.*	*c.*	No.	*a.*	*b.*	*c.*	No.	*a.*	*b.*	*c.*
1	0·0039	0·0004	0·0000	21	0·0823	0·0088	0·0007	41	0·1607	0·0172	0·0013
2	0·0078	0·0008	0·0001	22	0·0862	0·0092	0·0007	42	0·1646	0·0176	0·0013
3	0·0118	0·0013	0·0001	23	0·0901	0·0097	0·0007	43	0·1685	0·0181	0·0014
4	0·0157	0·0017	0·0001	24	0·0941	0·0101	0·0008	44	0·1725	0·0185	0·0014
5	0·0196	0·0021	0·0002	25	0·0980	0·0105	0·0008	45	0·1764	0·0189	0·0014
6	0·0235	0·0025	0·0002	26	0·1019	0·0109	0·0008	46	0·1803	0·0193	0·0015
7	0·0274	0·0029	0·0002	27	0·1058	0·0113	0·0009	47	0·1842	0·0197	0·0015
8	0·0314	0·0034	0·0003	28	0·1097	0·0118	0·0009	48	0·1881	0·0202	0·0015
9	0·0353	0·0038	0·0003	29	0·1137	0·0122	0·0009	49	0·1920	0·0206	0·0016
10	0·0392	0·0042	0·0003	30	0·1176	0·0126	0·0010	50	0·1960	0·0210	0·0016
11	0·0431	0·0046	0·0003	31	0·1215	0·0130	0·0010	51	0·1999	0·0214	0·0016
12	0·0470	0·0050	0·0004	32	0·1254	0·0134	0·0010	52	0·2038	0·0218	0·0016
13	0·0510	0·0055	0·0004	33	0·1293	0·0139	0·0010	53	0·2077	0·0223	0·0017
14	0·0549	0·0059	0·0004	34	0·1333	0·0143	0·0011	54	0·2116	0·0227	0·0017
15	0·0588	0·0063	0·0005	35	0·1372	0·0147	0·0011	55	0·2156	0·0231	0·0017
16	0·0627	0·0067	0·0005	36	0·1411	0·0151	0·0011	56	0·2195	0·0235	0·0018
17	0·0666	0·0071	0·0005	37	0·1450	0·0155	0·0012	57	0·2234	0·0239	0·0018
18	0·0705	0·0076	0·0006	38	0·1489	0·0160	0·0012	58	0·2273	0·0244	0·0018
19	0·0745	0·0080	0·0006	39	0·1525	0·0164	0·0012	59	0·2312	0·0248	0·0019
20	0·0784	0·0084	0·0006	40	0·1568	0·0168	0·0013	60	0·2352	0·0252	0·0019

TABLES LXVI, LXVII.

"EQUATION *b*" AND "EQUATION *c*" IN WHOLE NUMBERS BY THE FIRST ĀRYA-SIDDHĀNTA

(*corresponding to Tables VI, VII, "Indian Calendar"*).

Tables LXVI A and LXVII A state the values of "equation *b*" and "equation *c*" in detail.

TABLE LXVI.

LUNAR "EQUATION *b*."

Arg.	Eqn.	Arg.	Arg.	Eqn.	Arg.
0	139	500	500	139	1000
10	148	490	510	130	990
20	157	480	520	121	980
30	165	470	530	114	970
40	174	460	540	105	960
50	182	450	550	96	950
60	191	440	560	88	940
70	199	430	570	80	930
80	206	420	580	72	920
90	214	410	590	65	910
100	221	400	600	58	900
110	228	390	610	51	890
120	235	380	620	44	880
130	241	370	630	38	870
140	247	360	640	32	860
150	252	350	650	27	850
160	257	340	660	22	840
170	262	330	670	17	830
180	265	320	680	13	820
190	269	310	690	10	810
200	272	300	700	7	800
210	274	290	710	4	790
220	276	280	720	2	780
230	277	270	730	1	770
240	278	260	740	0	760
250	279	250	750	0	750

TABLE LXVII.

SOLAR "EQUATION *c*."

Arg.	Eqn.	Arg.	Arg.	Eqn.	Arg.
0	60	500	500	60	1000
10	56	490	510	63	990
20	52	480	520	67	980
30	49	470	530	71	970
40	45	460	540	75	960
50	41	450	550	78	950
60	38	440	560	81	940
70	34	430	570	85	930
80	31	420	580	88	920
90	28	410	590	92	910
100	25	400	600	95	900
110	21	390	610	98	890
120	18	380	620	101	880
130	16	370	630	103	870
140	14	360	640	106	860
150	11	350	650	108	850
160	9	340	660	110	840
170	7	330	670	112	830
180	6	320	680	113	820
190	4	310	690	115	810
200	3	300	700	116	800
210	2	290	710	117	790
220	1	280	720	118	780
230	1	270	730	119	770
240	0	260	740	119	760
250	0	250	750	119	750

Diff. in equation.	Last figure of argument.								
	9	8	7	6	5	4	3	2	1
	Add or subtract.								
9	8	7	6	5	4 or 5	4	3	2	1
8	7	6	6	5	4	3	2	2	1
7	6	6	5	4	3 or 4	3	2	1	1
6	5	5	4	4	3	2	2	1	1
5	4 or 5	4	3 or 4	3	2 or 3	2	1 or 2	1	0 or 1
4	4	3	3	2	2	2	1	1	0
3	3	2	2	2	1 or 2	1	1	1	0
2	2	2	1	1	1	1	1	0	0
1	1	1	1	1	0 or 1	0	0	0	0

TABLE LXVI A.

A) MOON'S "EQUATION *b*" BY THE FIRST ĀRYA-SIDDHĀNTA, FROM ☾'S MEAN ANOM. 0—500 (0°—180°).

Cols. 3, 4.—Equation and difference stand for either of the mean anom. values in cols. 2a, 2b. For the 24 base-equations see Table LXX.

Arg. b is ☾'s mean anom. in 1,000ths of circle.

Col. 3.—The equation is ☾'s greatest equation *plus* the actual equation, in 10,000ths of circle.

Serial No. of sine.	Arg. *b*.	Equation *b*.	Diff.	Arg. *b*.	Serial No of sine.	Arg. *b*.	Equation *b*.	Diff.	Arg. *b*.
1	2*a*	3	4	2*b*	1	2*a*	3	4	2*b*
0	0·0	139·4275		500·0	12	125·0	237·9056		375·0
	2·083	141·2505		497·916		127·083	239·1537		372·916
	4·16	143·0734	1·8229	495·83		129·16	240·4019	1·2482	370·83
	6·25	144·8963		493·75		131·25	241·6501		368·75
	8·3	146·7192		491·6		133·3	242·8983		366·6
1	10·416	148·5421		489·583	13	135·416	244·1464		364·583
	12·5	150·3569		487·5		137·5	245·3102		362·5
	14·583	152·1718	1·8148	485·416		139·583	246·4739	1·1637	360·416
	16·6	153·9866		483·3		141·6	247·6376		358·3
	18·75	155·8014		481·25		143·75	248·8014		356·25
2	20·83	157·6162		479·16	14	145·83	249·9651		354·16
	22·916	159·4148		477·083		147·916	251·0312		352·083
	25·0	161·2134	1·7986	475·0		150·0	252·0973	1·0661	350·0
	27·083	163·0120		472·916		152·083	253·1634		347·916
	29·16	164·8106		470·83		154·16	254·2294		345·83
3	31·25	166·6093		468·75	15	156·25	255·2955		343·75
	33·3	168·3836		466·6		158·3	256·2640		341·6
	35·416	170·1579	1·7743	464·583		160·416	257·2324	0·9684	339·583
	37·5	171·9322		462·5		162·5	258·2008		337·5
	39·583	173·7065		460·416		164·583	259·1692		335·416
4	41·6	175·4808		458·3	16	166·6	260·1376		333·3
	43·75	177·2227		456·25		168·75	261·0003		331·25
	45·83	178·9649	1·7419	454·16		170·83	261·8629	0·8626	329·16
	47·916	180·7065		452·083		172·916	262·7255		327·083
	50·0	182·4484		450·0		175·0	263·5882		325·0
5	52·083	184·1903		447·916	17	177·083	264·4508		322·916
	54·16	185·8917		445·83		179·16	265·2076		320·83
	56·25	187·5931	1·7014	443·75		181·25	265·9645	0·7568	318·75
	58·3	189·2944		441·6		183·3	266·7213		316·6
	60·416	190·9958		439·583		185·416	267·4781		314·583
6	62·5	192·6972		437·5	18	187·5	268·2350		312·5
	64·583	194·3581		435·416		189·583	268·8779		310·416
	66·6	196·0190	1·6609	433·3		191·6	269·5208	0·6429	308·3
	68·75	197·6799		431·25		193·75	270·1637		306·25
	70·83	199·3407		429·16		195·83	270·8066		304·16
7	72·916	201·0016		427·083	19	197·916	271·4495		302·083
	75·0	202·6139		425·0		200·0	271·9785		300·0
	77·083	204·2262	1·6123	422·916		202·083	272·5074	0·5290	297·916
	79·16	205·8384		420·83		204·6	273·0364		295·83
	81·25	207·4507		418·75		206·25	273·5654		293·75
8	83·3	209·0630		416·6	20	208·3	274·0944		291·6
	85·416	210·6104		414·583		210·416	274·5094		289·583
	87·5	212·1579	1·5475	412·5		212·5	274·9244	0·4150	287·5
	89·583	213·7053		410·416		214·583	275·3395		285·416
	91·6	215·2528		408·3		216·6	275·7545		283·3
9	93·75	216·8002		406·25	21	218·75	276·1695		281·25
	95·83	218·2829		404·16		220·83	276·4707		279·16
	97·916	219·7655	1·4826	402·083		222·916	276·7718	0·3011	277·083
	100·0	221·2481		400·0		225·0	277·0729		275·0
	102·083	222·7308		397·916		227·083	277·3740		272·916
10	104·16	224·2134		395·83	22	229·16	277·6751		270·83
	106·25	225·6231		393·75		231·25	277·8541		268·75
	108·3	227·0329	1·4097	391·6		233·3	278·0332	0·1790	266·6
	110·416	228·4426		389·583		235·416	278·2122		264·583
	112·5	229·8523		387·5		237·5	278·3912		262·5
11	114·583	231·2620		385·416	23	239·583	278·5703		260·416
	116·6	232·5907		383·3		241·6	278·6272		258·3
	118·75	233·9194	1·3287	381·25		243·75	278·6842	0·0570	256·25
	120·83	235·2482		379·16		245·83	278·7412		254·16
	122·916	236·5769		377·083		247·916	278·7981		252·083
					24	250·0	278·8551		250·0

TABLE LXVI A—*Contd.*

(B) MOON'S "EQUATION *b*" BY THE FIRST ĀRYA-SIDDHĀNTA FROM ☾'S MEAN ANOM. 500—1000 (180°—360°).

Col. 3.—The equation is ☾'s greatest equation *minus* the actual equation, in 10,000ths of circle.

Serial No. of sine.	Arg. *b*.	Equation *b*.	Diff.	Arg. *b*.	Serial No. of sine.	Arg. *b*.	Equation *b*.	Diff.	Arg. *b*.
1	2*a*	3	4	2*b*	1	2*a*	3	4	2*b*
0	500·0	139·4275		1000·0	12	625·0	40·9495		875·0
	502·08$\dot{3}$	137·6046		997·91$\dot{6}$		627·08$\dot{3}$	39·7014		872·91$\dot{6}$
	504·1$\dot{6}$	135·7817	1·8229	995·8$\dot{3}$		629·1$\dot{6}$	38·4532	1·2482	870·8$\dot{3}$
	506·25	133·9588		993·75		631·25	37·2050		868·75
	508·$\dot{3}$	132·1359		991·$\dot{6}$		633·$\dot{3}$	35·9568		866·$\dot{6}$
1	510·41$\dot{6}$	130·3130		989·58$\dot{3}$	13	635·41$\dot{6}$	34·7087		864·58$\dot{3}$
	512·5	128·4982		987·5		637·5	33·5449		862·5
	514·58$\dot{3}$	126·6833	1·8148	985·41$\dot{6}$		639·58$\dot{3}$	32·3812	1·1637	860·41$\dot{6}$
	516·$\dot{6}$	124·8685		983·$\dot{3}$		641·$\dot{6}$	31·2175		858·3
	518·75	123·0537		981·25		643·75	30·0537		856·25
2	520·8$\dot{3}$	121·2389		979·1$\dot{6}$	14	645·8$\dot{3}$	28·8900		854·16
	522·91$\dot{6}$	119·4403		977·08$\dot{3}$		647·91$\dot{6}$	27·8239		852·08$\dot{3}$
	525·0	117·6417	1·7986	975·0		650·0	26·7578	1·0661	850·0
	527·08$\dot{3}$	115·8431		972·91$\dot{6}$		652·08$\dot{3}$	25·6917		847·91$\dot{6}$
	529·1$\dot{6}$	114·0444		970·8$\dot{3}$		654·1$\dot{6}$	24·6257		845·8$\dot{3}$
3	531·25	112·2458		968·75	15	656·25	23·5596		843·75
	533·$\dot{3}$	110·4715		966·6		658·$\dot{3}$	22·5911		841·6
	535·41$\dot{6}$	108·6972	1·7743	964·58$\dot{3}$		660·41$\dot{6}$	21·6227	0·9684	839·58$\dot{3}$
	537·5	106·9229		962·5		662·5	20·6543		837·5
	539·58$\dot{3}$	105·1486		960·41$\dot{6}$		664·58$\dot{3}$	19·6859		835·41$\dot{6}$
4	541·6	103·3743		958·$\dot{3}$	16	666·6	18·7175		833·3
	543·75	101·6324		956·25		668·75	17·8548		831·25
	545·8$\dot{3}$	99·8905	1·7419	954·1$\dot{6}$		670·8$\dot{3}$	16·9922	0·8626	829·16
	547·91$\dot{6}$	98·1486		952·08$\dot{3}$		672·91$\dot{6}$	16·1296		827·08$\dot{3}$
	550·0	96·4067		950·0		675·0	15·2669		825·0
5	552·08$\dot{3}$	94·6648		947·91$\dot{6}$	17	677·08$\dot{3}$	14·4043		822·91$\dot{6}$
	554·1$\dot{6}$	92·9634		945·8$\dot{3}$		679·1$\dot{6}$	13·6475		820·8$\dot{3}$
	556·25	91·2620	1·7014	943·75		681·25	12·8906	0·7568	818·75
	558·$\dot{3}$	89·5607		941·$\dot{6}$		683·$\dot{3}$	12·1338		816·$\dot{6}$
	560·41$\dot{6}$	87·8593		939·58$\dot{3}$		685·41$\dot{6}$	11·3770		814·58$\dot{3}$
6	562·5	86·1579		937·5	18	687·5	10·6201		812·5
	564·58$\dot{3}$	84·4970		935·41$\dot{6}$		689·58$\dot{3}$	9·9772		810·41$\dot{6}$
	566·$\dot{6}$	82·8361	1·6609	933·$\dot{3}$		691·$\dot{6}$	9·3343	0·6429	808·$\dot{3}$
	568·75	81·1752		931·25		693·75	8·6914		806·25
	570·8$\dot{3}$	79·5144		929·1$\dot{6}$		695·8$\dot{3}$	8·0485		804·16
7	572·91$\dot{6}$	77·8535		927·08$\dot{3}$	19	697·91$\dot{6}$	7·4056		802·08$\dot{3}$
	575·0	76·2412		925·0		700·0	6·8766		800·0
	577·08$\dot{3}$	74·6289	1·6123	922·91$\dot{6}$		702·08$\dot{3}$	6·3477	0·5290	797·91$\dot{6}$
	579·1$\dot{6}$	73·0167		920·8$\dot{3}$		704·$\dot{6}$	5·8187		795·8$\dot{3}$
	581·25	71·4044		918·75		706·25	5·2897		793·75
8	583·$\dot{3}$	69·7921		916·$\dot{6}$	20	708·$\dot{3}$	4·7607		791·$\dot{6}$
	585·41$\dot{6}$	68·2447		914·58$\dot{3}$		710·416	4·3457		789·58$\dot{3}$
	587·5	66·6972	1·5475	912·5		712·5	3·9307	0·4150	787·5
	589·58$\dot{3}$	65·1498		910·41$\dot{6}$		714·58$\dot{3}$	3·5156		785·41$\dot{6}$
	591·$\dot{6}$	63·6023		908 $\dot{3}$		716·6	3·1006		783·$\dot{3}$
9	593·75	62·0549		906·25	21	718·75	2·6855		781·25
	595·8$\dot{3}$	60·5722		904·1$\dot{6}$		720·8$\dot{3}$	2·3844		779·1$\dot{6}$
	597·91$\dot{6}$	59·0896	1·4826	902·08$\dot{3}$		722·91$\dot{6}$	2·0833	0·3011	777·08$\dot{3}$
	600·0	57·6069		900·0		725·0	1·7822		775·0
	602·08$\dot{3}$	56·1243		897·916		727·08$\dot{3}$	1·4811		772·916
10	604·1$\dot{6}$	54·6417		895·8$\dot{3}$	22	729·1$\dot{6}$	1·1800		770·8$\dot{3}$
	606·25	53·2319		893·75		731·25	1·0010		768·75
	608·$\dot{3}$	51·8222	1·4097	891·$\dot{6}$		733·$\dot{3}$	0·8219	0·1790	766·6
	610·41$\dot{6}$	50·4125		889·58$\dot{3}$		735·41$\dot{6}$	0·6429		764·58$\dot{3}$
	612·5	49·0028		887·5		737·5	0·4639		762·5
11	614·58$\dot{3}$	47·5931		885·41$\dot{6}$	23	739·58$\dot{3}$	0·2848		760·41$\dot{6}$
	616·$\dot{6}$	46·2644		883·$\dot{3}$		741·6	0·2279		758·$\dot{3}$
	618·75	44·9357	1·3287	881·25		743·75	0·1709	0·0570	756·25
	620·8$\dot{3}$	43·6069		879·1$\dot{6}$		745·8$\dot{3}$	0·1139		754·16
	622·91$\dot{6}$	42·2782		877·08$\dot{3}$		747·91$\dot{6}$	0·0570		752·08$\dot{3}$
					24	750·0	0·0000		750·0

TABLE LXVII A.

(*A*) Sun's "equation c" by the First Ārya-Siddhanta from ⊙'s mean anomaly 0—500 (0°—180°).

Cols. 3, 4.—Equation and Difference stand for either of the mean anom: values in cols. 2a, 2b. For the 24 base-equations see Table LXVII, above Vol. XIV.

"Arg. c" is ⊙'s mean anomaly in 1,000ths of circle.

Col. 3.—The equation is ⊙'s greatest equation *minus* the actual equation, in 10,000ths of circle.

Serial No. of sine.	Arg. c.	Equation c.	Diff.	Arg. c.	Serial No. of sine.	Arg. c.	Equation c.	Diff.	Arg. c.
1	2a	3	4	2b	1	2a	3	4	2b
0	0·0	59·6875		500·0	12	125·0	17·4826		375·0
	2·083	58·9078		497·916		127·083	16·9479		372·916
	4·16	58·1281	0·7797	495·83		129·16	16·4132	0·5347	370·83
	6·25	57·3484		493·75		131·25	15·8785		368·75
	8·3	56·5687		491·6		133·3	15·3438		366·6
1	10·416	55·7890		489·583	13	135·416	14·8090		364·583
	12·5	55·0096		487·5		137·5	14·3125		362·5
	14·583	54·2303	0·7793	485·416		139·583	13·8160	0·4965	360·416
	16·6	53·4510		483·3		141·6	13·3194		358·3
	18·75	52·6717		481·25		143·75	12·8229		356·25
2	20·83	51·8924		479·16	14	145·83	12·3264		354·16
	22·916	51·1215		477·083		147·916	11·8715		352·083
	25·0	50·3507	0·7708	475·0		150·0	11·4167	0·4549	350·0
	27·083	49·5799		472·916		152·083	10·9618		347·916
	29·16	48·8090		470·83		154·16	10·5069		345·83
3	31·25	48·0382		468·75	15	156·25	10·0521		343·75
	33·3	47·2778		466·6		158·3	9·6389		341·6
	35·416	46·5174	0·7604	464·583		160·416	9·2257	0·4132	339·583
	37·5	45·7569		462·5		162·5	8·8125		337·5
	39·583	44·9965		460·416		164·583	8·3993		335·416
4	41·6	44·2361		458·3	16	166·6	7·9861		333·3
	43·75	43·4896		456·25		168·75	7·6181		331·25
	45·83	42·7431	0·7465	454·16		170·83	7·2500	0·3681	329·16
	47·916	41·9965		452·083		172·916	6·8819		327·083
	50·0	41·2500		450·0		175·0	6·5139		325·0
5	52·083	40·5035		447·916	17	177·083	6·1458		322·916
	54·16	39·7743		445·83		179·16	5·8229		320·83
	56·25	39·0451	0·7292	443·75		181·25	5·5000	0·3229	318·75
	58·3	38·3160		441·6		183·3	5·1771		316·6
	60·416	37·5868		439·583		185·416	4·8542		314·583
6	62·5	36·8576		437·5	18	187·5	4·53 3		312·5
	64·583	36·1458		435·416		189·583	4·2569		310·416
	66·6	35·4340	0·7118	433·3		191·6	3·9826	0·2743	308·3
	68·75	34·7222		431·25		193·75	3·7083		306·25
	70·83	34·0104		429·16		195·83	3·4340		304·16
7	72·916	33·2986		427·083	19	197·916	3·1597		302·083
	75·0	32·6076		425·0		200·0	2·9340		300·0
	77·083	31·9167	0·6910	422·916		202·083	2·7083	0·2257	297·916
	79·16	31·2257		420·83		204·16	2·4826		295·83
	81·25	30·5347		418·75		206·25	2·2569		293·75
8	83·3	29·8438		416·6	20	208·3	2·0312		291·6
	85·416	29·1806		414·583		210·416	1·8042		289·583
	87·5	28·5174	0·6632	412·5		212·5	1·6771	0·1771	287·5
	89·583	27·8542		410·416		214·583	1·5000		285·416
	91·6	27·1910		408·3		216·6	1·3229		283·3
9	93·75	26·5278		406·25	21	218·75	1·1458		281·25
	95·83	25·8924		404·16		220·83	1·0174		279·16
	97·916	25·2569	0·6354	402·083		222·916	0·8889	0·1285	277·083
	100·0	24·6215		400·0		225·0	0·7604		275·0
	102·083	23·9861		397·916		227·083	0·6319		272·916
10	104·16	23·3507		395·83	22	229·16	0·5035		270·83
	106·25	22·7465		393·75		231·25	0·4279		268·75
	108·3	22·1424	0·6042	391·6		233·3	0·3522	0·0756	266·6
	110·416	21·5382		389·583		235·416	0·2766		264·583
	112·5	20·9341		387·5		237·5	0·2010		262·5
11	114·583	20·3299		385·416	23	239·583	0·1254		260·41
	116·6	19·7604		383·3		241·6	0·1003		258·3
	118·75	19·1910	0·5694	381·25		243·75	0·0752	0·0251	256·25
	120·83	18·6215		379·16		245·83	0·0502		254·16
	122·916	18·0521		377·083		247·916	0·0251		252·083
					24	250·0	0·0		250·0

TABLE LXVII A—*Contd.*

(B) SUN'S "EQUATION *c*" BY THE FIRST ĀRYA-SIDDHĀNTA FROM ⊙'S MEAN ANOMALY 500—1000 (180°—360°).

Col. 3.—The equation is ⊙'s greatest equation *plus* the actual equation, in 10,000ths of circle.

Serial No. of sine.	Arg *c*.	Equation *c*.	Diff.	Arg. *c*.	Serial No. of sine.	Arg. *c*.	Equation *c*.	Diff.	Arg. *c*.
1	2*a*	3	4	2*b*	1	2*a*	3	4	2*b*
0	500·0	59·6875		1000·0	12	625·0	101·8924		875·0
	502·083	60·4672		997·916		627·083	102·4271		872·916
	504·16	61·2469	0·7797	995·83		629·16	102·9618	0·5347	870·83
	506·25	62·0266		993·75		631·25	103·4965		868·75
	508·3	62·8063		991·6		633·3	104·0312		866·6
1	510·416	63·5860		989·583	13	635·416	104·5660		864·583
	512·5	64·3654		987·5		637·5	105·0625		862·5
	514·583	65·1447	0·7793	985·416		639·583	105·5590	0·4965	860·416
	516·6	65·9240		983·3		641·6	106·0556		858·3
	518·75	66·7033		981·25		643·75	106·5521		856·25
2	520·83	67·4826		979·16	14	645·83	107·0486		854·16
	522·916	68·2535		977·083		647·916	107·5035		852·083
	525·0	69·0243	0·7708	975·0		650·0	107·9583	0·4549	850·0
	527·083	69·7951		972·916		652·083	108·4132		847·916
	529·16	70·5660		970·83		654·16	108·8681		845·83
3	531·25	71·3368		968·75	15	656·25	109·3229		843·75
	533·3	72·0972		966·6		658·3	109·7361		841·6
	535·416	72·8576	0·7604	964·583		660·416	110·1493	0·4132	839·583
	537·5	73·6181		962·5		662·5	110·5265		837·5
	539·583	74·3785		960·416		664·583	110·9767		835·416
4	541·6	75·1389		958·3	16	666·6	111·3889		833·3
	543·75	75·8854		956·25		668·75	111·7569		831·25
	545·83	76·6319	0·7465	954·16		670·83	112·1250	0·3681	829·16
	547·916	77·3785		952·083		672·916	112·4931		827·083
	550·0	78·1250		950·0		675·0	112·8611		825·0
5	552·083	78·8715		947·916	17	677·083	113·2292		822·916
	554·16	79·6007		945·83		679·16	113·5521		820·83
	556·25	80·3299	0·7292	943·75		681·25	113·8750	0·3229	818·75
	558·3	81·0590		941·6		683·3	114·1979		816·6
	560·416	81·7882		939·583		685·416	114·5208		814·583
6	562·5	82·5174		937·5	18	687·5	114·8438		812·5
	564·583	83·2292		935·416		689·583	115·1181		810·416
	566·6	83·9410	0·7118	933·3		691·6	115·3924	0·2743	808·3
	568·75	84·6528		931·25		693·75	115·6667		806·25
	570·83	85·3646		929·16		695·83	115·9410		804·16
7	572·916	86·0764		927·083	19	697·916	116·2153		802·083
	575·0	86·7674		925·0		700·0	116·4410		800·0
	577·083	87·4583	0·6910	922·916		702·083	116·6667	0·2257	797·916
	579·16	88·1493		920·83		704·16	116·8924		795·83
	581·25	88·8403		918·75		706·25	117·1181		793·75
	583·3	89·5312		916·6	20	708·3	117·3438		791·6
	585·416	90·1944		914·583		710·416	117·5208		789·583
	587·5	90·8576	0·6632	912·5		712·5	117·6979	0·1771	787·5
	589·583	91·5208		910·416		714·583	117·8750		785·416
	591·6	92·1840		908·3		716·6	118·0521		783·3
9	593·75	92·8472		906·25	21	718·75	118·2292		781·25
	595·83	93·4826		904·16		720·83	118·3576		779·16
	597·916	94·1181	0·6354	902·083		722·916	118·4861	0·1285	777·083
	600·0	94·7535		900·0		725·0	118·6146		775·0
	602·083	95·3889		897·916		727·083	118·7431		772·916
10	604·16	96·0243		895·83	22	729·16	118·8715		770·83
	606·25	96·6285		893·75		731·25	118·9471		768·75
	608·3	97·2326	0·6042	891·6		733·3	119·0228	0·0756	766·6
	610·416	97·8368		889·583		735·416	119·0984		764·583
	612·5	98·4410		887·5		737·5	119·1740		762·5
11	614·583	99·0451		885·416	23	739·583	119·2496		760·416
	616·6	99·6146		883·3		741·6	119·2747		758·3
	618·75	100·1840	0·5694	881·25		743·75	119·2998	0·0251	756·25
	620·83	100·7535		879·16		745·83	119·3248		754·16
	622·916	101·3229		877·083		747·916	119·3499		752·083
					24	750·0	119·3750		750·0

TABLE LXVIII.

INDICES OF TITHIS, KARAṆAS, YŌGAS AND NAKSHATRAS.

Indices of yōgas "(*y*)" are numerically the same as those of nakshatras "(*n*)."

This Table corresponds to Table VIII, "Indian Calendar."

TITHI AND KARAṆA.					YŌGA.		NAKSHATRA.			
Serial number.	No. in paksha (lunar fortnight).	Tithi-index (*t*).	KARAṆA.		Name.	No. of Yoga or Nakshatra.	Name.	Index of Nakshatra ("*n*") and Yōga ("*y*"). Ordinary (equal-space) system.	INDEX OF ENDING POINT OF NAKSHATRA AND YŌGA, BY THE UNEQUAL SPACE SYSTEMS OF	
			First half of Tithi.	Second half of Tithi.					Garga.	Brahma-Siddhānta
1	2	3	4	5	6		7	8	9	10
	Śukla.									
1	1	0 — 333·3̇	Kiṁstughna* .	1 Bava . .	Vishkambha .	1	Aśvinī . .	0 — 370·3̇70	370·3̇70	366·0108
2	2	333·3̇— 666·6̇	2 Bālava .	3 Kaulava .	Prīti . .	2	Bharaṇī . .	370·3̇70— 740·7̇40	555·5̇	549·0051
3	3	666·6̇—1000	4 Taitila .	5 Gara . .	Āyushmat .	3	Kṛittikā . .	740·7̇40—1111·1̇	925·9̇25	915·0270
4	4	1000 —1333·3̇	6 Vaṇij . .	7 Vishṭi† .	Saubhāgya .	4	Rōhiṇī . .	1111·1̇ —1481·4̇81̇	1481·4̇81̇	1464·0432
	5	1333·3̇—1666·6̇	1 Bava . .	2 Bālava .	Śōbhana . .	5	Mṛigaśiras . .	1481·4̇81̇—1851·8̇51̇	1851·8̇51̇	1830·0540
6	6	1666·6̇—2000	3 Kaulava .	4 Taitila .	Atiganda .	6	Ārdrā . .	1851·8̇51̇—2222·2̇	2037·0̇37̇	2013·0594
7	7	2000 —2333·3̇	5 Gara . .	6 Vaṇij . .	Sukarman .	7	Punarvasu . .	2222·2 —2592·5̇92̇	2592·5̇92̇	2562·0756
8	8	2333·3̇—2666·6̇	7 Vishṭi† .	1 Bava . .	Dhṛiti . .	8	Pushya . .	2592·5̇92̇—2962·9̇62̇	2962·9̇62̇	2928·0864
9	9	2666·6—3000	2 Bālava .	3 Kaulava .	Śūla . .	9	Āślēshā . .	2962·9̇62̇—3333·3̇	3148·1̇48̇	3111·0918
10	10	3000 —3333·3̇	4 Taitila .	5 Gara . .	Gaṇḍa . .	10	Maghā . .	3333·3̇ —3703·7̇03̇	3518·5̇18̇	3477·1026
11	11	3333·3̇—3666·6̇	5 Vaṇij . .	7 Vishṭi . .	Vṛiddhi . .	11	Pūrva-Phalguṇī .	3703·7̇03̇—4074·0̇74	3888·8	3843·1134

12	12	3666·6̇—4000	1 Bava . .	2 Bālava .	Dhruva . .	12	Uttara-Phalgunī .	4074·0̇7̇—4444·4̇	4444·4̇	4392·1296
13	13	4000 —4333·3̇	3 Kaulava .	4 Taitila .	Vyāghāta .	13	Hasta . .	4444·4̇ —4814·8̇1̇4̇	4814·8̇1̇4̇	4758·1404
14	14	4333·3̇—4666·6̇	5 Gara . .	6 Vaṇij . .	Harshaṇa .	14	Chitrā . .	4814·8̇1̇4̇—5185·1̇8̇5̇	5185·1̇8̇5̇	5124·1512
15	15	4666·6̇—5000	7 Vishṭi . .	1 Bava . .	Vajra . .	15	Svāti . .	5185·1̇8̇5̇—5555·5̇	5370·3̇7̇0̇	5307·1566
	Kṛishṇa.									
16	1	5000 —5333·3̇	2 Bālava .	3 Kaulava .	Siddhi‡ . .	16	Viśākhā . .	5555·5̇ —5925·9̇2̇5̇	5925·9̇2̇5̇	5856·1728
17	2	5333·3̇—5666·6̇	4 Taitila .	5 Gara . .	Vyatīpāta .	17	Anurādhā . .	5925·9̇2̇5̇—6296·2̇9̇6̇	6296·2̇9̇6̇	6222·1836
18	3	5666·6̇—6000	6 Vaṇij . .	7 Vishṭi . .	Varīyas . .	18	Jyēshṭhā . .	6292·2̇9̇6̇—6666·6̇	6481·4̇8̇1̇	6405·1890
19	4	6000 —6333·3̇	1 Bava . .	2 Bālava .	Parigha . .	19	Mūla . . .	6666·6̇ —7037·0̇3̇7̇	6852·8̇5̇2̇	6771·1998
20	5	6333·3̇—6666·6̇	3 Kaulava .	4 Taitila .	Śiva . .	20	Pūrva Āshāḍhā .	7037·0̇3̇7̇—7407·4̇0̇7̇	7222·2̇	7137·2106
21	6	6666·6̇—7000	5 Gara . .	6 Vaṇij . .	Siddha . .	21	Uttara-Āshāḍhā .	7407·4̇0̇7̇—7777·7̇	7777·7̇	7686·2269§
22	7	7000 —7333·3̇	7 Vishṭi . .	1 Bava . .			Abhijit§ . .	...	...	7803·9352§
23	8	7333·3̇—7666·6̇	2 Bālava .	3 Kaulava .	Sādhya . .	22	Śravaṇa . .	7777·7̇ —8148·1̇4̇8̇	8148·1̇4̇8̇	8169·9460
24	9	7666·6̇—8000	4 Taitila .	5 Gara . .	Śubha . .	23	Dhanishṭhā§§ .	8148·1̇4̇8̇—8518·5̇1̇8̇	8518·5̇1̇8̇	8535·9568
25	10	8000 —8333·3̇	6 Vaṇij . .	7 Vishṭi . .	Śukla . .	24	Śatabhishaj¶ .	8518·5̇1̇8̇—8888·8̇	8703·7̇0̇3̇	8718·9622
26	11	8333·3̇—8666·6̇	1 Bava . .	2 Bālava .	Brahman .	25	Pūrva-Bhadrapadā	8888·8̇ —9259·2̇5̇9̇	9074·0̇7̇4̇	9084·9730
27	12	8666·6̇—9000	3 Kaulava .	4 Taitila .	Indra . .	26	Uttara-Bhadrapadā	9259·2̇5̇9̇—9629·6̇2̇9̇	9629·6̇2̇9̇	9633·9892
28	13	9000 —9333·3̇	5 Gara . .	6 Vaṇij . .	Vaidhṛiti .	27	Rēvatī . .	9629·6̇2̇9̇—10,000	10·000	10,000
29	14	9333·3̇—9666·6̇	7 Vishṭi . .	Śakuni . .	...					
30	15	9666·6̇—10000	Chatushpada .	Nāga . .	...					

* or Kimtughna. † Vishṭi is also called Bhadrā, or Kalyāṇī. ‡ or Asrij.

§ The figures given in Col. 10 follow the limits of Abhijit as given in the "*Indian Calendar*," p. 22, *viz.*, from 276° 42′ 15″ to 280° 56′ 30″. Professor Jacobi and Dr. Burgess, however, give these limits as from 276° 40′ to 281° 40′ (*Epig. Ind. I., p. 149 ; Journal R. A. S., 1893, p. 755*). If they are correct, the figures in Col. 10 should be read as beginning at 7685·1852 and ending at 7824·074.

§§ or Śravishṭhā. ¶ or Śatatārakā.

TABLE LXIX.

SERIAL NUMBER OF DAYS IN A YEAR A.D. FOR TWO CONSECUTIVE YEARS.

N. B.—The numbers given are those in a common year. In Leap-years, after February 29, the day of the month must be reduced by 1. Thus Day 153, in a Leap-year, is not June 2, but June 1.

The Table is the same as Table IX, "Indian Calendar."

PART I.

Day of month.	Number of days reckoned from 1st January of the same year.											Day of month.
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
1	1	32	60	91	121	152	182	213	244	274	305	335	1
2	2	33	61	92	122	153	183	214	245	275	306	336	2
3	3	34	62	93	123	154	184	215	246	276	307	337	3
4	4	35	63	94	124	155	185	216	247	277	308	338	4
5	5	36	64	95	125	156	186	217	248	278	309	339	5
6	6	37	65	96	126	157	187	218	249	279	310	340	6
7	7	38	66	97	127	158	188	219	250	280	311	341	7
8	8	39	67	98	128	159	189	220	251	281	312	342	8
9	9	40	68	99	129	160	190	221	252	282	313	343	9
10	10	41	69	100	130	161	191	222	253	283	314	344	10
11	11	42	70	101	131	162	192	223	254	284	315	354	11
12	12	43	71	102	132	163	193	224	255	285	316	346	12
13	13	44	72	103	133	164	194	225	256	286	317	347	13
14	14	45	73	104	134	165	195	226	257	287	318	348	14
15	15	46	74	105	135	166	196	227	258	288	319	349	15
16	16	47	75	106	136	167	197	228	259	289	320	350	16
17	17	48	76	107	137	168	198	229	260	290	321	351	17
18	18	49	77	108	138	169	199	230	261	291	322	352	18
19	19	50	78	109	139	170	200	231	262	292	323	353	19
20	20	51	79	110	140	171	201	232	263	293	324	354	20
21	21	52	80	111	141	172	202	233	264	294	325	355	21
22	22	53	81	112	142	173	203	234	265	295	326	356	22
23	23	54	82	113	143	174	204	235	266	296	327	357	23
24	24	55	83	114	144	175	205	236	267	297	328	358	24
25	25	56	84	115	145	176	206	237	268	298	329	359	25
26	26	57	85	116	146	177	207	238	269	299	330	360	26
27	27	58	86	117	147	178	208	239	270	300	331	361	27
28	28	59	87	118	148	179	209	240	271	301	332	362	28
29	29	60	88	119	149	180	210	241	272	302	333	363	29
30	30	...	89	120	150	181	211	242	273	303	334	364	30
31	31	...	90	...	151	...	212	243	...	304	...	365	31
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	

TABLE LXIX—*Contd.*

SERIAL NUMBER OF DAYS IN A YEAR A.D. FOR TWO CONSECUTIVE YEARS.

N. B.—When the previous year was a Leap-year, the days of the month must all be reduced by 1; and so all those after February 29, when the given year is a Leap-year.

PART II.

Day of month.	NUMBER OF DAYS RECKONED FROM 1 JANUARY OF THE PRECEDING YEAR.												Day of month.
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
1	366	397	425	456	486	517	547	578	609	639	670	700	1
2	367	398	426	457	487	518	548	579	610	640	671	701	2
3	368	399	427	458	488	519	549	580	611	641	672	702	3
4	369	400	428	459	489	520	550	581	612	642	673	703	4
5	370	401	429	460	490	521	551	582	613	643	674	704	5
6	371	402	430	461	491	522	552	583	614	644	675	705	6
7	372	403	431	462	492	523	553	584	615	645	676	706	7
8	373	404	432	463	493	524	554	585	616	646	677	707	8
9	374	405	433	464	494	525	555	586	617	647	678	708	9
10	375	406	434	465	495	526	556	587	618	648	679	709	10
11	376	407	435	466	496	527	557	588	619	649	680	710	11
12	377	408	436	467	497	528	558	589	620	650	681	711	12
13	378	409	437	468	498	529	559	590	621	651	682	712	13
14	379	410	438	469	499	530	560	591	622	652	683	713	14
15	380	411	439	470	500	531	561	592	623	653	684	714	15
16	381	412	440	471	501	532	562	593	624	654	685	715	16
17	382	413	441	472	502	533	563	594	625	655	686	716	17
18	383	414	442	473	503	534	564	595	626	656	687	717	18
19	384	415	443	474	504	535	565	596	627	657	688	718	19
20	385	416	444	475	505	536	566	597	628	658	689	719	20
21	386	417	445	476	506	537	567	598	629	659	690	720	21
22	387	418	446	477	507	538	568	599	630	660	691	721	22
23	388	419	447	478	508	539	569	600	631	661	692	722	23
24	389	420	448	479	509	540	570	601	632	662	693	723	24
25	390	421	449	480	510	541	571	602	633	663	694	724	25
26	391	422	450	481	511	542	572	603	634	664	695	725	26
27	392	423	451	482	512	543	573	604	635	665	696	726	27
28	393	424	452	483	513	544	574	605	636	666	697	727	28
29	394	425	453	484	514	545	575	606	637	667	698	728	29
30	395	...	454	485	515	546	576	607	638	668	699	729	30
31	396	...	455	...	516	...	577	608	...	669	...	730	31
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec	

TABLE LXX.

Conversion of Tithi-parts and indices of Tithis, Nakshatras and Yōgas into time.

(Corresponding to Table X, "Indian Calendar.")

The "Argument" unit 1=4^{m}·2524 (a trifle over 4½ minutes of time), in the case of the tithi-index (*t*), and 4^{m}·3831 in the case of the nakshatra index (*n*).

Argument.	Time equivalent of				Argument.	Time equivalent of				Argument.	Time equivalent of			
	Tithi-parts.	Tithi-index (*t*).	Nakshatra index (*n*).	Yōga-index (*y*).		Tithi-parts.	Tithi-index (*t*).	Nakshatra index (*n*)	Yōga-index (*y*).		Tithi-parts.	Tithi-index (*t*).	Nakshatra index (*n*).	Yōga-index (*y*).
	H. M.	H. M.	H. M.	H. M.		H. M.	H. M.	H. M.	H. M.		H. M.	H. M.	H. M.	H. M.
1	0 1	0 4	0 4	0 4	41	0 58	2 54	2 41	2 30	76	1 48	5 23	4 59	4 38
2	0 3	0 9	0 8	0 7	42	1 0	2 59	2 45	2 34	77	1 49	4 27	5 3	4 42
3	0 4	0 13	0 12	0 11	43	1 1	3 3	2 49	2 37	78	1 51	5 32	5 7	4 46
4	0 6	0 17	0 16	0 15	44	1 2	3 7	2 53	2 41	79	1 52	5 36	5 11	4 49
5	0 7	0 21	0 20	0 18	45	1 4	3 11	2 57	2 45	80	1 53	5 40	5 15	4 53
6	0 9	0 26	0 24	0 22										
7	0 10	0 30	0 28	0 26	46	1 5	3 16	3 1	2 48	81	1 55	5 44	5 19	4 57
8	0 11	0 34	0 31	0 29	47	1 7	3 20	3 5	2 52	82	1 56	5 49	5 23	5 0
9	0 13	0 38	0 35	0 33	48	1 8	3 24	3 9	2 56	83	1 58	5 53	5 27	5 4
10	0 14	0 43	0 39	0 37	49	1 9	3 28	3 13	2 59	84	1 59	5 57	5 30	5 7
					50	1 11	3 33	3 17	3 3	85	2 0	6 1	5 34	5 11
11	0 16	0 47	0 43	0 40										
12	0 17	0 51	0 47	0 44										
13	0 18	0 55	0 51	0 48	51	1 12	3 37	3 21	3 7	86	2 2	6 6	5 38	5 15
14	0 20	1 0	0 55	0 51	52	1 14	3 41	3 25	3 10	87	2 3	6 10	5 42	5 18
15	0 21	1 4	0 59	0 55	53	1 15	3 45	3 29	3 14	88	2 5	6 14	5 46	5 22
					54	1 17	3 50	3 32	3 18	89	2 6	6 18	5 50	5 26
16	0 23	1 8	1 3	0 59	55	1 18	3 54	3 36	3 21	90	2 8	6 23	5 54	5 29
17	0 24	1 12	1 7	1 2										
18	0 26	1 17	1 11	1 6										
19	0 27	1 21	1 15	1 10	56	1 19	3 58	3 40	3 25	91	2 9	6 27	5 58	5 33
20	0 28	1 25	1 19	1 13	57	1 21	4 2	3 44	3 29	92	2 10	6 31	6 2	5 37
					58	1 22	4 7	3 48	3 32	93	2 12	6 35	6 6	5 40
21	0 30	1 29	1 23	1 17	59	1 24	4 11	3 52	3 36	94	2 13	6 40	6 10	5 44
22	0 31	1 34	1 27	1 21	60	1 25	4 15	3 56	3 40	95	2 15	6 44	6 14	5 48
23	0 33	1 38	1 30	1 24										
24	0 34	1 42	1 34	1 28										
25	0 35	1 46	1 38	1 32	61	1 26	4 19	4 0	3 43	96	2 16	6 48	6 18	5 51
					62	1 28	4 24	4 4	3 47	97	2 17	6 52	6 22	5 55
26	0 37	1 51	1 42	1 35	63	1 29	4 28	4 8	3 51	98	2 19	6 57	6 26	5 59
27	0 38	1 55	1 46	1 39	64	1 31	4 32	4 12	3 54	99	2 20	7 1	6 29	6 2
28	0 40	1 59	1 50	1 42	65	1 32	4 36	4 16	3 58	100	2 22	7 5	6 33	6 6
29	0 41	2 3	1 54	1 46										
30	0 43	2 8	1 58	1 50										
					66	1 34	4 41	4 20	4 2	200	4 43	14 10	13 7	12 18
31	0 44	2 12	2 2	1 53	67	1 35	4 45	4 24	4 5	300	7 5	21 16	19 40	18 12
32	0 45	2 16	2 6	1 57	68	1 36	4 49	4 28	4 9	400	9 27	28 21		
33	0 47	2 20	2 10	2 1	69	1 38	4 53	4 31	4 13	500	11 49	35 26		
34	0 48	2 25	2 14	2 4	70	1 39	4 58	4 35	4 16	600	14 10	42 31		
35	0 50	2 29	2 18	2 8										
36	0 51	2 33	2 22	2 12	71	1 41	5 2	4 39	4 20	700	16 32	49 37		
37	0 52	2 37	2 26	2 15	72	1 42	5 6	4 43	4 24	800	18 54	56 42		
38	0 54	2 42	2 30	2 19	73	1 43	5 10	4 47	4 27	900	21 16	63 47		
39	0 55	2 46	2 33	2 23	74	1 45	5 15	4 51	4 31	1000	23 37	70 52		
40	0 57	2 50	2 37	2 26	75	1 46	5 19	4 55	4 35					

TABLE LXXI.

The European Calendar.

A. Initial days of centuries, Julian and Gregorian Calendars.

Odd years of centuries.	Centuries A.D. Old Style. 0 700 1400	100 800 1500	200 900 1600	300 1000 1700	400 1100 1800	500 1200 1900	600 1300 2000	New Style. Sa 1600 2000	Fr 1700 2100	W 1800 2200	Mo 1500 1900 2300	Leap-years.
	Initial days.											
0 28 56 84	Th	W	Tu	Mo	S	Sa	Fr	Sa	Th	Tu	S	L.Y.
1 29 57 85	Sa	Fr	Th	W	Tu	Mo	S	Mo	Sa	Th	Tu	
2 30 58 86	S	Sa	Fr	Th	W	Tu	Mo	Tu	S	Fr	W	
3 31 59 87	Mo	S	Sa	Fr	Th	W	Tu	W	Mo	Sa	Th	
4 32 60 88	Tu	Mo	S	Sa	Fr	Th	W	Th	Tu	S	Fr	L.Y.
5 33 61 89	Th	W	Tu	Mo	S	Sa	Fr	Sa	Th	Tu	S	
6 34 62 90	Fr	Th	W	Tu	Mo	S	Sa	S	Fr	W	Mo	
7 35 63 91	Sa	Fr	Th	W	Tu	Mo	S	Mo	Sa	Th	Tu	
8 36 64 92	S	Sa	Fr	Th	W	Tu	Mo	Tu	S	Fr	W	L.Y.
9 37 65 93	Tu	Mo	S	Sa	Fr	Th	W	Th	Tu	S	Fr	
10 38 66 94	W	Tu	Mo	S	Sa	Fr	Th	Fr	W	Mo	Sa	
11 39 67 95	Th	W	Tu	Mo	S	Sa	Fr	Sa	Th	Tu	S	
12 40 68 96	Fr	Th	W	Tu	Mo	S	Sa	S	Fr	W	Mo	L.Y.
13 41 69 97	S	Sa	Fr	Th	W	Tu	Mo	Tu	S	Fr	W	
14 42 70 98	Mo	S	Sa	Fr	Th	W	Tu	W	Mo	Sa	Th	
15 43 71 99	Tu	Mo	S	Sa	Fr	Th	W	Th	Tu	S	Fr	
16 44 72 100	W	Tu	Mo	S	Sa	Fr	Th	Fr	W	Mo	Sa	L.Y.
17 45 73	Fr	Th	W	Tu	Mo	S	Sa	S	Fr	W	Mo	
18 46 74	Sa	Fr	Th	W	Tu	Mo	S	Mo	Sa	Th	Tu	
19 47 75	S	Sa	Fr	Th	W	Tu	Mo	Tu	S	Fr	W	
20 48 76	Mo	S	Sa	Fr	Th	W	Tu	W	Mo	Sa	Th	L.Y.
21 49 77	W	Tu	Mo	S	Sa	Fr	Th	Fr	W	Mo	Sa	
22 50 78	Th	W	Tu	Mo	S	Sa	Fr	Sa	Th	Tu	S	
23 51 79	Fr	Th	W	Tu	Mo	S	Sa	S	Fr	W	Mo	
24 52 80	Sa	Fr	Th	W	Tu	Mo	S	Mo	Sa	Th	Tu	L.Y.
25 53 81	Mo	S	Sa	Fr	Th	W	Tu	W	Mo	Sa	Th	
26 54 82	Tu	Mo	S	Sa	Fr	Th	W	Th	Tu	S	Fr	
27 55 83	W	Tu	Mo	S	Sa	Fr	Th	Fr	W	Mo	Sa	

B. Week-days for one year, applicable to both old and new style dates.

Months in Common-years.	S Mo Tu W Th Fr Sa	Mo Tu W Th Fr Sa S	Tu W Th Fr Sa S Mo	W Th Fr Sa S Mo Tu	Th Fr Sa S Mo Tu W	Fr Sa S Mo Tu W Th	Sa S Mo Tu W Th Fr	Months in Leap-years.
	1	2	3	4	5	6	7	
	8	9	10	11	12	13	14	Jan.
Jan.	15	16	17	18	19	20	21	April.
Oct.	22	23	24	25	26	27	28	July.
	29	30	31					
				1	2	3	4	
	5	6	7	8	9	10	11	
Feb.	12	13	14	15	16	17	18	Feb.
Mar.	19	20	21	22	23	24	25	Aug.
Nov.	26	27	28	29	30	31		
							1	
	2	3	4	5	6	7	8	
	9	10	11	12	13	14	15	Sept.
April	16	17	18	19	20	21	22	Dec.
July	23	24	25	26	27	28	29	
	30	31						
			1	2	3	4	5	
	6	7	8	9	10	11	12	
Aug.	13	14	15	16	17	18	19	May
	20	21	22	23	24	25	26	
	27	28	29	30	31			
						1	2	
	3	4	5	6	7	8	9	
	10	11	12	13	14	15	16	
Sept.	17	18	19	20	21	22	23	June
Dec.	24	25	26	27	28	29	30	
	31							
		1	2	3	4	5	6	
	7	8	9	10	11	12	13	
May.	14	15	16	17	18	19	20	Oct.
	21	22	23	24	25	26	27	
	28	29	30	31				
					1	2	3	
	4	5	6	7	8	9	10	Mar.
June	11	12	13	14	15	16	17	Nov.
	18	19	20	21	22	23	24	
	25	26	27	28	29	30	31	

To find the initial day of a given year A.D. take the day marked in Section A, perpendicular under the given century and horizontal opposite the given year. Note this initial day in column 2 of the heading of Section B. Find the given day of month in the body of Section B. Run up to the week-day in horizontal line with the initial day in the heading. The day so found is the week-day of the given day of month and year.

E.g. Wanted week-day of 23rd March, A.D. 645. At junction of century 600 (perpendicular) and 45 (horizontal) in Section A is Saturday. This was the initial day of A.D. 645. The year was common. The week-day noted in the heading of Section B at the junction of 23rd March (perpendicular) and of "Sa." in column 2 of heading (horizontal) is "W," Wednesday. Therefore 23rd March, A.D. 645, was a Wednesday.

In common years work with the month on left, in leap-years with that on right.

N. B.—In the New Style the years 1600 and 2000 are leap-years, but 1700, 1800, 1900 are common years. The initial week-day of the first year of each New Style century is given *above* it in heading of Section A. For the initial week-day of other years of the century look for the day in the junction of columns as mentioned above; *e.g.*, A.D. 1900 began (top) on Monday. 1901 began (junction of columns) on Tuesday. 1928 begins on Sunday. 1919 began on Wednesday.

TABLE LXXII.

VALUE OF $\bar{a}$, b, c AT BEGINNING OF CENTURIES OF THE KALIYUGA BY THE FIRST ĀRYA-SIDDHĀNTA AT MEAN SUNRISE ON DAY OF OCCURRENCE OF MEAN MĒSHĀ-SAMKRANTI, WHICH IS THE MOMENT WHEN MEAN SUN REACHES LONGITUDE 0°.

Century.	Week day.	a.	b.	c.
36	0	7177·6056	135·4688	279·9111
37	0	6045·4346	723·3175	280·2723
38	0	4913·2637	311·1661	280·6336
39	0	3781·0927	899·0148	280·9948
40	0	2648·9218	486·8635	281·3560
41	0	1516·7509	74·7121	281·7172
42	0	384·5799	662·5608	282·0784
43	6	8913·7771	214·1179	279·7019
44	6	7781·6062	801·9665	280·0631
45	6	6649·4352	389·8152	280·4243
46	6	5517·2643	977·6639	280·7855
47	6	4385·0933	565·5125	281·1467
48	6	3252·9224	153·3612	281·5079

N. B.—The value of b, the ☾'s mean anomaly, is given as estimated by Professor Jacobi. The present author estimates its value as less than the given amount by 3·6. In a very close case both valuations may be tried.

TABLE LXXIII.

MEAN SUNRISE VALUE OF *a*, *b*, *c* FOR YEARS OF THE K. Y. CENTURY BY THE ARYA-SIDDHĀNTA.

* *Years thus marked are years of 366 days, the rest of 365 each.*

Year.	W-d.	*a.*	*b.*	*c.*	Year.	W-d.	*a.*	*b.*	*c.*
0	0	0	0	0	50	0	4433·9145	793·9243	0·1806
1	1	3600·6340	246·4427	999·2918	51	1	8034·5485	40·3670	999·4724
*2	2	7201·2680	492·8853	998·5836	*52	2	1635·1825	286·8097	998·7642
3	4	1140·5339	775·6196	0·6131	53	4	5574·4484	569·5439	0·7938
4	5	4741·1679	22·0623	999·9049	54	5	9175·0824	815·9866	0·0855
5	6	8341·8019	268·5049	999·1967	55	6	2775·7164	62·4293	999·3773
*6	0	1942·4359	514·9476	998·4885	*56	0	6376·3504	308·8719	998·6691
7	2	5881·7018	797·6819	0·5181	57	2	315·6163	591·6062	0·6987
8	3	9482·3358	44·1246	999·8099	58	3	3916·2503	838·0489	999·9905
9	4	3082·9698	290·5672	999·1017	59	4	7516·8843	84·4916	999·2823
*10	5	6683·6038	537·0099	998·3934	*60	5	1117·5183	330·9342	998·5741
11	0	622·8697	819·7442	0·4230	61	0	5056·7842	613·6685	0·6036
12	1	4223·5037	66·1868	999·7148	62	1	8657·4182	860·1112	999·8954
*13	2	7824·1377	312·6295	999·0066	63	2	2258·0522	106·5538	999·1872
14	4	1763·4035	595·3638	1·0362	*64	3	5858·6862	352·9965	998·4790
15	5	5364·0375	841·8065	0·3280	65	5	9797·9521	635·7308	0·5086
16	6	8964·6716	88·2491	999·6197	66	6	3398·5861	882·1735	999·8004
*17	0	2565·3056	334·6918	998·9115	67	0	6999·2201	128·6161	999·0921
18	2	6504·5714	617·4261	0·9411	*68	1	599·8541	375·0588	998·3839
19	3	105·2054	863·8687	0·2329	69	3	4539·1200	657·7931	0·4135
20	4	3705·8394	110·3114	999·5247	70	4	8139·7540	904·2357	999·7053
*21	5	7306·4734	356 7541	998·8165	*71	5	1740·3880	150·6784	998·9971
22	0	1245·7393	639·4884	0·8460	72	0	5679·6539	433·4127	1·0267
23	1	4846·3733	885·9310	0·1378	73	1	9280·2879	679·8554	0·3184
24	2	8447·0073	132·3737	999·4296	74	2	2880·9219	926·2980	999·6102
*25	3	2047·6413	378·8164	998·7214	*75	3	6481·5559	172·7407	998·9020
26	5	5986·9072	661·5506	0·7510	76	5	420·8217	455·4750	0·9316
27	6	9587·5412	907·9933	0·0428	77	6	4021·4557	701·9176	0·2234
28	0	3188·1752	154·4360	999·3346	78	0	7622·0897	948·3603	999·5152
*29	1	6788·8092	400·8786	998·6263	*79	1	1222·7238	194·8030	998·8070
					80	3	5161·9896	477·5372	0·8365
30	3	728·0751	683·6129	0·6559	81	4	8762·6236	723·9799	0·1283
31	4	4328·7091	930·0556	999·9477	82	5	2363·2576	970·4226	999·4201
32	5	7929·3431	176·4982	999·2395	*83	6	5963·8916	216·8652	998·7119
*33	6	1529·9771	422·9409	998·5313	84	1	9903·1575	499·5995	0·7415
34	1	5469·2430	705·6752	0·5609					
					85	2	3503·7915	746·0422	0·0332
35	2	9069·8770	952·1179	999·8526	86	3	7104·4255	992·4849	999 3250
36	3	2670·5110	198·5605	999·1444	*87	4	705·0595	238·9275	998·6168
*37	4	6271·1450	445·0032	998·4362	88	6	4644·3254	521·6618	0·6464
38	6	210·4109	727·7375	0·4658	89	0	8244·9594	768·1045	999·9382
39	0	3811·0449	974·1801	999·7576					
					90	1	1845·5934	14·5471	999·2300
40	1	7411·6789	220·6228	999·0494	*91	2	5446·2274	260·9898	998 5218
*41	2	1012·3129	467·0655	998·3412	92	4	9385·4933	543·7241	0·5513
42	4	4951·5788	749·7998	0·3707	93	5	2986·1273	790·1668	999·8431
43	5	8552·2128	996·2424	999·6625	94	6	6586·7613	36·6094	999·1349
*44	6	2152·8468	242·6851	998·9543					
					*95	0	187·3953	283·0521	998·4267
45	1	6092·1126	525·4194	0·9839	96	2	4126·6612	565·7864	0·4563
46	2	9692·7466	771·8620	0·2757	97	3	7727·2952	812·2290	999·7481
47	3	3293·3806	18·3047	999·5675	98	4	1327·9292	58·6717	999·0398
*48	4	6894·0147	264·7474	998·8592	*99	5	4928·5632	305·1144	998·3316
49	6	833·2805	547·4817	0·8888					
					100	0	8867·8291	587·8487	0·3612

TABLE LXXIV.

DAILY VALUES OF *a*, *b*, *c* FROM 0 MINA TO 2 MĒSHA.

For calculation of their value at mean sunrise on the day Chaitra Sukla 1.

Interval of days from true Mēsha-samkranti.	Day of Solar month.	Week day.	*a*.	*b*.	*c*.
1	2	3	4	5	6
30	Mīna 0	3	9163·7800	838·6681	912·3908
29	,, 1	4	9502·4119	874·9597	915·1286
28	,, 2	5	9841·0438	911·2513	917·8664
27	,, 3	6	179·6756	947·5429	920·6042
26	,, 4	0	518·3075	983·8345	923·3420
25	,, 5	1	856·9394	20·1262	926·0798
24	,, 6	2	1195·5713	56·4178	928·8176
23	,, 7	3	1534·2032	92·7094	931·5554
22	,, 8	4	1872·8350	129·0010	934·2931
21	,, 9	5	2211·4669	165·2927	937·0309
20	,, 10	6	2550·0988	201·5843	939·7687
19	,, 11	0	2888·7306	237·8759	942·5065
18	,, 12	1	3227·3625	274·1675	945·2443
17	,, 13	2	3565·9944	310·4591	947·9821
16	,, 14	3	3904·6263	346·7508	950·7199
15	,, 15	4	4243·2581	383·0424	953·4576
14	,, 16	5	4581·8900	419·3340	956·1954
13	,, 17	6	4920·5219	455·6256	958·9332
12	,, 18	0	5259·1538	491·9173	961·6710
11	,, 19	1	5597·7856	528·2089	964·4088
10	,, 20	2	5936·4175	564·5005	967·1466
9	,, 21	3	6275·0494	600·7921	969·8844
8	,, 22	4	6613·6813	637·0838	972·6221
7	,, 23	5	6952·3131	673·3754	975·3599
6	,, 24	6	7290·9450	709·6670	978·0977
5	,, 25	0	7629·5769	745·9586	980·8355
4	,, 26	1	7968·2088	782·2503	983·5733
3	,, 27	2	8306·8406	818·5419	986·3111
2	,, 28	3	8645·4725	854·8335	989·0489
1	,, 29	4	8984·1044	891·1251	991·7866
	Mēsha 0	5	9322·7363	927·4168	994·5244
	,, 1	6	9661·3681	963·7084	997·2622
	,, 2	0	0	0	0

The figures for Mēsha 0 are those for mean sunrise on the day when true Mēsha-saṁkrānti occurred, *i.e.*, on the day when true sun reached long. 0°.

The table serves equally for calculation from the day of mean Mēsha-saṁkrānti by noting the interval of days.

TABLE LXXV.

MOON'S EQUATION OF CENTRE BY THE FIRST ĀRYA-SIDDHĀNTA.

(For equation of sun's centre see Table XLVII, Vol. XIV above.)

Serial No. of sine.	Moon's mean anomaly.		Sine of mean Anom. angle.		Equation.			Moon's mean anomaly.		Serial No. of sine.
			Value in minutes.	Difference.	Equation in degrees.	Diff. per minute of anom.	Equation in 10,000th of circle.			
1	2		3	4	5	6	7	8		1
0	0° 0′	180° 0′	0′	225	0° 0′ 0″	5·250	0	180° 0′	360° 0′	0
1	3 45	176 15	225	224	0 19 41·25	5·226	9·114583	183 45	356 15	1
2	7 30	172 30	449	222	0 39 17·25	5·180	18·188657	187 30	352 30	2
3	11 15	168 45	671	219	0 58 42·75	5·110	27·181713	191 15	348 45	3
4	15 0	165 0	890	215	1 17 52·5	5·016	36·053240	195 0	345 0	4
5	18 45	161 15	1105	210	1 36 41·25	4·900	44·762730	198 45	341 15	5
6	22 30	157 30	1315	205	1 55 3·75	4·783	53·269675	202 30	337 30	6
7	26 15	153 45	1520	199	2 13 0·0	4·643	61·574074	206 15	333 45	7
8	30 0	150 0	1719	191	2 30 24·75	4·456	69·635415	210 0	330 0	8
9	33 45	146 15	1910	183	2 47 7·5	4·270	77·372684	213 45	326 15	9
10	37 30	142 30	2093	174	3 3 8·25	4·060	84·785878	217 30	322 30	10
11	41 15	138 45	2267	164	3 18 21·75	3·926	91·834490	221 15	318 45	11
12	45 0	135 0	2431	154	3 32 42·75	3·5947	98·478009	225 0	315 0	12
13	48 45	131 15	2585	143	3 46 11·5681	3·3516	104·718890	228 45	311 15	13
14	52 30	127 30	2728	131	3 58 45·6696	3·0603	110·537572	232 30	307 30	14
15	56 15	123 45	2859	119	4 10 16·4900	2·7979	115·867978	236 15	303 45	15
16	60 0	120 0	2978	106	4 20 44·0290	2·4844	120·710099	240 0	300 0	16
17	63 45	116 15	3084	93	4 30 3·0134	2·1797	125·023250	243 45	296 15	17
18	67 30	112 30	3177	79	4 38 13·4431	1·8416	128·807432	247 30	292 30	18
19	71 15	108 45	3256	65	4 45 10·0446	1·5234	132·021949	251 15	288 45	19
20	75 0	105 0	3321	51	4 50 52·8179	1·1953	134·666805	255 0	285 0	20
21	78 45	101 15	3372	37	4 55 21·7634	0·8672	136·742001	258 45	281 15	21
22	82 30	97 30	3409	22	4 58 36·8804	0·5156	138·247533	262 30	277 30	22
23	86 15	93 45	3431	7	5 0 32·8962	0·1641	139·142717	266 15	273 45	23
24	90 0	90 0	3438		5 1 9·8103		139·427548	270 0	270 0	24

WEST BENGAL SECRETARIAT LIBRARY